

Before the
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1990, 1991, and 1992 Cable Royalty) Docket No. 94-3
Distribution Proceeding) CARP-CD90-92

The Motion Picture Association of America, Inc. ("MPAA"), its member companies and other producers and/or syndicators of syndicated movies, series and specials broadcast by television stations ("Program Suppliers") in accordance with the Procedures established by the Copyright Arbitration Royalty Panel for submission of rebuttal testimony, and 37 C.F.R. §251.43, hereby submit their rebuttal case in the consolidated 1990, 1991 and 1992 Cable Royalty Distribution Proceeding.

Program Suppliers will present the following witnesses who will sponsor the exhibits referenced in their testimony:

Allen R. Cooper, Vice President
Technology Evaluation and Planning, MPAA

Martin Frankel, Professor of Statistics and Computer
Information Systems, Bernard Baruch College of the City
University of New York;

Marsha E. Kessler, Vice President,
Copyright Royalty Collection and Distribution, MPAA

Alan Rubin, Professor and Graduate Coordinator, School of
Communication Studies, Kent State University;

John R. Woodbury, Vice President
Charles River Associates.

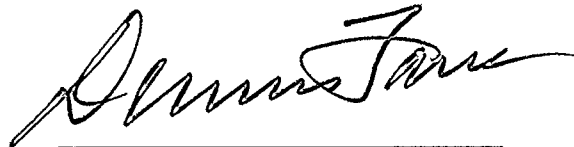
For the convenience of the Panel, Program Suppliers also are submitting the written testimony of the following witnesses from the 1989 and 1990 cable Royalty proceedings:

Dr. Stanley Besen

Robert Sieber

Program Suppliers do not intend to have these witnesses testify about the referenced testimony, but, instead, will incorporate by reference and rely upon their prior testimony

Respectfully submitted,



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Attorney for
PROGRAM SUPPLIERS

FURTHER TESTIMONY OF ALLEN R. COOPER, VICE PRESIDENT,
MOTION PICTURE ASSOCIATION OF AMERICA, ON BEHALF OF
"PROGRAM SUPPLIERS" WITH RESPECT TO PHASE 1 PROCEEDINGS:
DISTRIBUTION OF CABLE COPYRIGHT ROYALTIES, 1990-1991-1992

I appeared before this Panel on January 2, 1996 to present an introductory summary and overview of the testimony to be offered on behalf of "Program Suppliers" in this proceeding.

I appear now to sponsor a number of Exhibits previously introduced during cross examination by Program Suppliers counsel. These Exhibits were either prepared personally by me or were prepared under my supervision and which I have reviewed for accuracy. I shall also provide some additional testimony and Exhibits to rebut testimony offered by other parties in this proceeding.

EXHIBITS PREVIOUSLY OFFERED WHICH REQUIRE SPONSORSHIP

Exhibit P.S. Ex. 12-X

As reported on page 853 of the transcript, Mr. Lane presented the witness with copies of 9 pages from various issues of CableVision magazine. These were identified as pages from the issues of Feb. 12 and Feb. 17, 1990; November 18, 1991; May 4, 1992; and July 5, 1993. These pages are from a regular series published by CableVision under the heading "Database". On these pages, CableVision provides data with respect to the number of

affiliates and number of subscribers for various national and regional Basic and Pay-TV cable networks, including numerous networks which transmit sports events to cable systems and to subscribing television stations.

I have examined these pages and can certify that they are true copies of the "Database" compilations as published by CableVision. The numbers related with respect to the number of subscribers presented in this exhibit are also consistent with my personal knowledge of the size of these networks.

Exhibit P.S. Ex 24-X

Based on data from the "Regional Sports Networks Media Guide, March 1992", prepared by the National Cable Television Association "to provide (cable systems) with up-to-date facts on more than 20 regional sports networks" and a document entitled "Baseball Regional Television Networks-1992" prepared by the Office of the Commissioner of Major League Baseball, we have prepared summaries which dramatically show the extent to which "sports programming" is available in great quantity throughout the United States through means other than retransmission of "distant signals" by cable systems. These are included in P.S. Exhibit 9-R. My purpose is to rebut testimony that suggests that sports enthusiasts are dependent upon the retransmission of "distant signals" by cable systems to view such events.

According to the "NCTA Guide", every state (and the District of Columbia) is served by one or more "Regional Sports Network"

(RSN). These networks produce play-by-play coverage of professional and college sports events and transmit them by microwave or satellite to licensed cable systems and television stations. The programs transmitted by the RSNs are not "distant signals" subject to Section 111 royalties.

I am also sponsoring several maps which dramatically indicate the widespread availability of major league baseball via National and Regional Sports Networks and from broadcasts by regional broadcast networks consisting of television stations (Network Affiliates and Independents) which are licensed to retransmit the games of a particular baseball team.

Exhibit P.S. Ex. 39-X

This Exhibit was originally presented as a one-page copy of a print-out dated December 19, 1995, prepared by Cable Data Corporation. It presented data with respect to "distant signal carriage" of station KTVU, Oakland, CA by "Form 3" cable systems during 6 accounting periods, 1990-1 through 1992-2. For each period, the number of cable systems and a count of their subscribers, based on "Statements Of Account" information, was presented. As initially presented, the Exhibit did not indicate that the data related only to "Form 3" systems. I have prepared and offer now a revised Exhibit P.S. 39-X for the same periods, with separate data for "Form 1" and "Form 2" systems, and two alternate listings for "Form 3" systems - "Total, Local and Distant" and "Distant Only." This Exhibit is presented to show the very

significant decline in the number of "Form 3" systems which retransmitted KTVU as a distant signal, and the resultant reduction (37%) in the number of "Form 3" cable system subscribers having access to KTVU as a "distant signal."

Exhibit P.S. Exs. 38-X and 40-X

These Exhibits summarize data from the Statements of Account filed by cable systems serving Mariposa, California and Roseburg, Oregon for the 90-1 through 92-2 "accounting periods." The data were compiled by Cable Data Corporation and I can attest to their accuracy, especially as they pertain to the identification of stations KTVU (all six periods) and KTXL (90-1 only) and KMPH (all six periods) as Fox stations.

Exhibit P.S. Ex. 46-X

This Exhibit was prepared in response to testimony by Mr. Downey, a PBS witness, with respect to the carriage of PBS stations in the Jacksonville, Florida and Elkhart, Indiana areas. The Exhibit identifies the cable systems serving these areas and the PBS affiliates retransmitted as local or distant signals. The data shown, compiled by Cable Data Corporation from Statements of Account, indicate that of several systems in the Jacksonville Beach and Elkhart areas, most carried only a "local" PBS station. Two small ("Form 1") Elkhart-area systems did not retransmit any PBS signal during some or all of these accounting periods.

P.S. Exhibit 6-R

This new Exhibit summarizes and expands upon data from P.S. Ex.12-X, i.e. CableVision magazine's "Database" reports. Here we present data for five years, 1989-1993, for 36 national and regional sports networks which transmit professional sports games. Our purpose in presenting these data is to indicate the year-to-year increase in the number of cable subscribers that have access to broadcasts of professional sports games via national and regional sports networks. The total number of regional sports network subscribers in 1993 was 28.8 million, or 36% higher than the 1989 total. This shows a declining need for cable subscribers to obtain sports programming from distant signals.

P.S. Exhibit 7-R

This one-page exhibit summarizes data prepared for Program Suppliers by Cable Data Corporation. The exhibit, originally submitted as P.S. Exhibit 8-X, reports that for the 46 Independent Stations "most carried" as distant signals by "Form 3" cable systems, the number of quarter-hours of professional sports programming (play-by-play coverage of Major League Baseball, National Basketball Association, National Hockey League, and College Basketball and College Football games) broadcast during February, May, July and November 1991. Cable Data Corporation also tallied the total number of quarter-hours - all programs, all types - broadcast by these stations.

The data indicate that sports programming on WTBS - the most widely

carried distant Independent - accounted for 602 quarter-hours of transmission time, or only 6.7% of total "time". Sports programming accounted for more than 5% of total "time" on only two other stations - WGN, Chicago and WSBK, Boston. Less than 1% of "quarter-hours" on 20 of the 46 stations examined was used to present play-by-play broadcasts of Major League Baseball, National Basketball Association and/or National Hockey League games. These data indicate the small portion of total programming Sports occupies on these stations.

P.S. Exhibit 8-R

This three-page Exhibit presents data with respect to the carriage and "Distant Signal Equivalents" generated by the retransmission of "distant signal" stations, including one or more PBS stations, by cable systems in the Bortz Survey sample, for 1990, 1991, and 1992. In this exhibit, we compared the proportion of PBS's DSE value (absent any consideration of application of the 3.75% rate) on each system. This offers a rough approximation of the share of royalties each system paid to obtain PBS station(s) on a distant signal basis.

We then compared this PBS share of royalties with the value assigned by the cable system to PBS in the Bortz Survey. This exhibit shows the wide variation between the cable copyright royalty obligations for the carriage of PBS stations and the "value" attributed to these systems by cable operators, according to the Bortz Survey.

P.S. Exhibit Ex. 9-R

With respect to "Distant Signal Carriage" of Major League Baseball, we relied upon a listing of Baseball Regional Television Networks - 1992 submitted as Exhibit D to the March 29, 1993 "Comments of the Office of the Commissioner of Baseball" in the FCC's inquiry into Sports Program Migration. My exhibit represents all television stations broadcasting MLB games which were retransmitted via "distant signals" by cable systems during 1992. Of the 211 stations, Cable Data Corporation data indicate that distant carriage by "Form 3" cable systems "generated" less than \$1,000 in cable royalty fees of 116 (55%) of these stations during the 1992-1 accounting period. These data are presented on the first page of this Exhibit.

In addition, we have calculated from the 1992-1 Statements of Account information compiled by CDC as to the number of "Form 3" cable systems which retransmitted these stations as "Local" signals, with zero "DSE" values and therefore for which no copyright royalties were remitted. This exhibit gives some indication of the widespread local carriage of baseball games. A good example of the extent of local carriage relates to the stations that carry Boston Red Sox. In total, the stations which carry Red Sox telecasts are available locally to over three million households throughout New England.

The number of cable systems carrying each of these stations as a local signal and the total number of cable system subscribers that

had access to these stations locally are reported in the second part of this exhibit. These pages show the wide availability of "sports stations" on a local basis to cable subscribers within the same region that a team is located.

As a graphic example of the widespread carriage of baseball games, I have included maps showing the extent of carriage via regional sports networks, local television stations, and individual cable system carriage of baseball games broadcasts in the Midwest.

P.S. Exhibit 10-R

As P.S. Exhibit 6-X, Program Suppliers had previously introduced a portion of the "1990-91 NBA Broadcast Manual" which lists the complete pre-season and regular-season NBA "Master TV Schedule". This "Master Schedule" identifies the organizations - Regional Sports Networks, National Broadcast Networks, or "Flagship Stations" licensed to transmit each of the 1,107 regular season games. The three-page exhibit I am now offering was prepared from this document. It indicates that 789 of 1,107 games, or over 72%, were scheduled to be distributed via regional or national cable or television networks. These data show that most television viewing of NBA games is via coverage originated by Regional Sports Networks and is beyond the purview of Section 111 of the Copyright Act.

CONCLUSION

These data indicate that play-by-play broadcasts of professional sports are widely available via Regional Sports Networks (RSNs) and

local stations which do not require cable copyright royalty payments by cable systems. JSC's Team Owners are compensated by the Regional Sports Networks, the television stations, and the Broadcast and Cable Networks they have licensed to broadcast their games. The widespread availability of telecasts of sports by RSNs and local broadcasts diminishes the need for cable systems to transmit these events via "distant signals."

I declare under penalty of perjury that the foregoing testimony is true and correct and of my personal knowledge. Executed on February 15, 1996,

Allen R. Cooper

Allen R. Cooper

STRICKEN 12 -X DATABASE

Subscriber Count

Satellite national services

Basic services	Affiliates	Subscribers
ACTS Satellite Network	420	9,200,000
Altman View Network	300	4,500,000
Arts & Entertainment Network (A&E)	4,600	42,000,000
Black Entertainment Television	1,800	24,218,000
CNBC	750	13,000,000
Cable News Network	12,177	52,600,000
Cable Value Network	1,800	23,300,000
C-SPAN	3,341	47,500,000
C-SPAN II	649	19,300,000
The Comedy Channel	500	6,000,000
Country Music Television	1,092	9,124,974
The Discovery Channel	7,052	47,400,000
Eco/Galavision	300	1,000,000
ESPN	20,500*	54,800,000
External Word Television Network	580	13,300,000
The Family Channel	8,435	45,870,000
Family Guide Network	60	4,500,000
FamilyNet	384	3,800,000
Financial News Network	3,500	32,000,000
FNN Sports	1,600	20,000,000
Headline News	4,443	39,400,000
Home Shopping Network	1,488	16,928,895
Home Shopping Network II	384	6,796,525
The Inspirational Network	920	9,500,000
International Television Network	25	7,868,900
J.C. Penney TV Shopping Channel	119	5,100,000
KTVT	417	3,600,000
The Learning Channel	1,150	19,000,000
Lifetime	4,600	46,400,000
Mind Extension University	156	8,000,000
MTV	5,405	47,137,000
Moviemax	447	14,000,000
The Nashville Network	8,318	45,923,000
National College Television	380	6,569,228
Nick At Nite	3,440	39,600,000
Nickelodeon	6,600	47,183,000
The Nostalgia Channel	421	8,000,000
Prevue Guide	400	12,000,000
QVC Network	1,000	14,100,000
RFD TV	30	2,182,190
Silent Network	189	13,600,000
SportsChannel America	25	2,100,000
TBS Superstation	13,013	51,000,000
Telemundo***	8	110,000
TNT	4,700	10,000,000
The Travel Channel	511	14,000,000
Trinity Broadcasting Network	725	9,100,000
Univision***	500	509,500
USA Network	10,100	50,800,000
VH-1	3,000	34,600,000
Vision Interfaith Satellite Network	315	6,200,000
The Weather Channel	3,700	39,200,000
WGN-TV	11,415	24,900,000
WWOR-TV	2,600	12,500,000
WPIX-TV	858	9,678,474
WSBK-TV	57	350,808
Bonus/basic services		
American Movie Classics	1,700	24,000,000
Bravo	375	3,000,000
Pay services		
Cinemax	3,650	6,600,000
The Disney Channel	5,700	4,337,300
Home Box Office	7,400	17,000,000
The Movie Channel	3,250	2,700,000
Showtime	6,000	6,600,000
Tuxedo Network	26	20,000
Audio services		
AEI Lifestyle	142	2,578,838
AEI StarTracks Vocal Hits	26	854,390
C-SPAN Audio Network	8	548,100
C-SPAN Audio Network II	4	440,700
Cable Radio Network	62	2,300,000
Galactic Radio	165	4,300,000
KKGO Super Jazz	18	133,639
Moody Bible Institute	63	1,058,368
Satellite Radio Network	237	483,000
Tempo Sound	125	1,250,000
WFMT Chicago	170	1,259,804
Text services		
AP News Cable	185	2,500,000
AP Business Plus	54	1,400,000
AP News Plus	75	2,100,000
Cable SportsTracker	41	875,000
EPG	280	6,800,000
EPG Jr.	330	300,000

Genesis Storytime	39	1,550,000
Reuters NewsView	127	2,437,000
Computer services		
DBC/MarketWatch	462	9,200,000
X*Press Executive	487	14,000
X*Press X*Change	487	14,000

Non satellite-fed national services

Basic services	Affiliates	Subscribers
Cable Video Entertainment	190	18,000,000
Consumer Classified Ad Network	3	195,000
Fuji Network	3	12,000
Vectra Consumer Shopping Guide	9	325,000
Pay services		
Nippon Golden Network	5	13,600
Cross-channel promotion services		
NuStar	351	10,097,742

Interactive services

Basic services	Affiliates	Subscribers
Video Jukebox Network	40	4,000,000

Regional services

Basic services	Affiliates	Subscribers
Arizona Sports Programming Network	N.A.	210,000
Atlanta Interfaith	7	180,000
Bay Area Religious Channel	6	113,000
Cable TV Network of New Jersey	34	1,396,451
The Ecumenical Channel	9	170,000
KBL Entertainment Network	67	1,200,000
Life Newsvision	35	50,000
Madison Square Garden Network	168	3,400,000
Meadows Racing Network	14	600,000
News 12 Long Island	4	594,000
Midwest Sports Channel	90	275,000
Niagara Frontier Sports Network	13	800,000
Northwest Cable Sports Network	3	700,000
Pacific Sports Network	N.A.	N.A.
Pennarama	28	750,000
Prime Cable	9	381,938
Prime Sports Network	11	300,000
Prime Ticket	163	3,800,000
SportsChannel (Chicago)	50	1,507,270
SportsChannel (Ohio)	2	280,000
Sunshine Network	200	2,800,000
Pay services		
Home Sports Entertainment	250	1,000,000
Home Team Sports	125	1,200,000
New England Sports Network	171	317,201
Prism	87	427,000
Pro-Am Sports	173	523,000
SportsChannel (Florida)	22	650,000
SportsChannel (Los Angeles)	76	125,000
SportsChannel (New England)	154	1,028,431
SportsChannel (New York)	100	1,300,000

Note: Figures for affiliate/subscriber counts will be updated quarterly unless information is provided by the service. Send information to: CableVision, Cable Stars, 345 Park Avenue South, 9th Floor, New York, NY 10010.

N.A. denotes information not available.

*Includes MMDS and SMATV systems. **Count represents standalone affiliates/subscribers; portions of SC America are carried on Home Team Sports and the SportsChannel family of regional services. ***Spanish-speaking households.

Announced services

Satellite-fed services	Expected launch
American Western Network	1st Quarter 1990
The Amc Network	1st Quarter 1990
Cable Shopping Mall (QVC/CN II)	4/90
Cable Channel Network	1990
Cable TV Network	2nd Quarter 1990
CDI: The Digital Music Network	1st Quarter 1990
Cable TV Network	3/90
Digital Cable Radio	1st Quarter 1990
Digital Radio Channel	1st Quarter 1990
The Gaming Network	9/90
The Global Channel	1st Quarter 1990
Global Village Network	3rd Quarter 1990
HAI TV Comedy Network (MTV)	4/90
The How-To Channel	2nd Quarter 1990
In Court	9/90
Madison Entertainment Network	1990
Midwest Sports News Network	2/90
Musical Images Channel	1990
The Sci-Fi Channel	4th Quarter 1990
The Syndex Channel	1990
Talk Television	1990
Non satellite-fed services	Expected launch
ACTV	1st Quarter 1990
Main Street	1990
On Demand/LTV TV Network	1990

Cablevision

INFORMATION AND ANALYSIS FOR CABLE TELEVISION MANAGEMENT FEBRUARY '2, '90

WASHINGTON DC 20006
1600 EYE STREET NW
MPAA
SANDRA CAROLLO
52713 900507 CUMP 1 466
*****S-DIGIT 20006

DEBT WORRIES
BEHIND "NEW" VIACOM

ESPN/NEL REDUX?

NEWS PRODUCTION
NEW REVENUE

JAPANESE PRIEST
BLESSSES HEADEND

New cable philosophy:
CUSTOMER IS KING

From left:
Time Warner's Hugh Panero
Cablevision Systems' Patricia Fales
Mantelham Gabriel, Glen Friedman

DATABASE

Subscriber Count

Satellite national services

Basic services

	Affiliates	Subscribers
ACTS Satellite Network	450	9,200,000
Alternate View Network	300	4,500,000
American Movie Classics	2,100	29,000,000
America's Disability Channel	N.A.	N.A.
Arts & Entertainment Network (A&E)	5,400	48,000,000
Black Entertainment Television	2,200	29,100,000
Bravo	450	5,000,000
CNBC	1,100	17,000,000
Cable News Network	9,930	55,657,000
Channel America	7	328,500
C-SPAN	3,948	31,900,000
C-SPAN II	783	22,100,000
The Comedy Channel	800	8,300,000
Country Music Television	2,201	12,000,000
The Discovery Channel	7,363	52,900,000
E! Entertainment Television	665	15,600,000
ESPN*	21,300	56,265,000
Eternal Word Television Network	665	16,000,000
The Family Channel	8,965	51,000,000
FamilyNet	345	3,800,000
Financial News Network	3,600	35,500,000
FNN Sports	2,500	26,000,000
Galavision	140	N.A.
HA! TV	575	7,500,000
Headline News	4,352	44,000,000
Home Shopping Network	1,500	17,000,000
Home Shopping Network II	400	7,000,000
The Inspirational Network	810	6,800,000
International Channel	10	606,150
J.C. Penney Shopping Network	500	14,000,000
KTVI	479	2,200,000
The Learning Channel	1,277	20,900,000
Lifetime	4,900	50,000,000
Mind Extension University	189	6,600,000
Mizlou Sports News Network	70	7,000,000
MTV	6,260	52,700,000
The Nashville Network	10,465	51,009,000
National College Television	200	5,983,244
Nick At Nite	3,740	46,500,000
Nickelodeon	7,910	52,900,000
North American Television	1	6,300
Nostalgia Television	572	10,880,713
Prevue Guide	656	19,489,852
Prime Network**	1	85,000
QVC Network	3,000	35,700,000
Silent Network	198	14,200,000
SportsChannel America**	58	2,320,000
TBS Superstation	10,464	55,500,000
Telemundo	30	1,105,032
TNT	5,372	50,067,000
The Travel Channel	633	16,175,000
Trinity Broadcasting Network	1,015	13,074,000
Univision	814	11,062,592
USA Network	10,100	53,800,000
VH-1	3,400	38,800,000
Vision Interfaith Satellite Network	417	7,500,000
The Weather Channel	4,300	46,800,000
WGN	12,348	32,500,000
WPIX	723	9,600,000
WSBK	150	2,000,000
WWOR	3,013	13,500,000

Pay services

Cinemax	5,458	6,400,000
The Disney Channel	6,100	5,003,000
Home Box Office	8,833	17,300,000
The Movie Channel	3,250	3,000,000
Showtime	6,000	7,300,000

Audio services

AEI Lifestyle	142	2,578,838
AEI StarTracks Vocal Hits	26	854,390
C-SPAN Audio Network	25	1,500,000
C-SPAN Audio Network II	16	500,000
Cable Radio Network	70	2,700,000
Digital Cable Radio	1	N.A.
Japan Cable Radio	7	2,000
KLON	20	249,804
Moody Bible Institute	47	715,533
Satellite Radio Network	237	483,000
Superradio	300	7,000,000

WFMT Chicago	170	1,453,861
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Text services

AP News Cable	185	2,500,000
AP Business Plus	54	1,400,000
AP News Plus	75	2,100,000
Cable SportsTracker	42	1,389,708
EPG	119	4,753,354
EPG Jr.	404	499,302
Reuters NewsView	127	2,437,000
Story Vision Network	40	2,100,000

Computer services

X*Press Executive/X*Change	600	14,000
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Cross-channel promotion services

NuStar	650	15,600,000
Prime Time Tonight	400	7,200,000

Non satellite-fed national services

Basic services

	Affiliates	Subscribers
Consumer Classified Ad Network	3	195,000
Fuji Network	3	12,000
Vector Consumer Shopping Guide	9	325,000

Pay services

Nippon Golden Network	5	13,600
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Interactive services

Basic services

	Affiliates	Subscribers
Video Jukebox Network	67	7,500,000

Regional services

Basic services

	Affiliates	Subscribers
Arizona Sports Programming Network	1	310,000
Atlanta Interfaith	3	225,000
Bay Area Religious Channel	6	113,000
Cable TV Network of New Jersey	34	1,500,000
The Ecumenical Channel	9	170,000
Florida Tourism Channel	20	754,000
KBL Entertainment Network	67	1,200,000
Life Newsvision	35	50,000
Madison Square Garden Network	199	4,300,000
Meadows Racing Network	17	700,000
News 12 Long Island	4	601,000
Midwest Sports Channel	90	275,000
Niagara Frontier Sports Network	13	800,000
Northwest Cable Sports Network	3	700,000
Orange County Cable News	5	220,000
Pacific Sports Network	34	1,100,000
Pennarama	28	750,000
Prime Sports Network (Intermountain West)	30	300,000
Prime Sports Network (Midwest)	6	30,000
Prime Sports Network (Rocky Mountain)	110	780,000
Prime Sports Network (Upper Midwest)	4	108,000
Prime Sports Northwest	65	1,100,000
Prime Ticket	128	4,200,000
SportsChannel (Bay Area)	25	N.A.
SportsChannel (Chicago)	72	1,691,000
SportsChannel (Cincinnati)	2	70,000
SportsChannel (Ohio)	16	650,000
SportsChannel (Philadelphia)	41	1,300,000
SportSouth	70	1,000,000
Sunshine Network	200	2,900,000

Pay services

Home Sports Entertainment	475	2,400,000
Home Team Sports	183	1,800,000
New England Sports Network	171	380,000
Prism	87	470,000
Pro-Am Sports	212	625,000
SportsChannel (Florida)	54	950,000
SportsChannel (Los Angeles)	76	125,000
SportsChannel (New England)	164	1,200,000
SportsChannel (New York)	115	1,300,000

Note: Figures for affiliate/subscriber counts will be updated quarterly unless information is provided by the service. Send information to: CableVision, Cable Sales, 825 7th Avenue, New York, NY 10019.

N.A. denotes information not available. *Includes MIMDS and SMATV systems. **Count represents standalone affiliates/subscribers; portions are carried on various regional sports networks.

D A T A B A S E

NETWORK SUBSCRIBER COUNTS

BASIC SERVICES	AFFILIATES	SUBS	BASIC SERVICES	AFFILIATES	SUBS
ACTS Satellite Network	478	10,000,000	Prevue Guide	835	24,526,075
American Movie Classics	2,828	35,000,000	QVC Fashion Channel	380	6,000,000
America's Disability Channel	238	14,200,000	QVC Network	3,900	41,000,000
Arts & Entertainment Network	7,000	51,300,000	SCOLA/News Of All Nations	35	2,800,000
Black Entertainment Television	2,407	31,600,000	Silent Network	238	14,200,000
Bravo	455	6,000,000	SportsChannel America**	58	2,320,000
CNBC	3,000	43,000,000	TBS Superstation	11,105	57,207,000
Cable News Network	10,877	59,000,000	Telemundo	36	1,362,036
Channel America	13	429,300	TNT	6,958	54,600,000
C-SPAN	4,055	54,000,000	The Travel Channel	735	17,500,000
C-SPAN II	800	24,500,000	Trinity Broadcasting Network	1,015	14,000,000
Comedy Central	1,282	19,000,000	Univision	814	11,062,692
Country Music Television	1,974	13,700,000	USA Network	10,100	58,000,000
Courtroom Television Network	500	5,000,000	VH-1	3,985	42,500,000
The Discovery Channel	9,397	56,000,000	Video Jukebox Network	96	9,050,000
E! Entertainment Television	780	19,000,000	VISN	670	10,500,000
ESPN*	23,300	59,195,000	The Weather Channel	4,500	49,063,000
EWTV	774	23,300,000	WGN	13,969	35,000,000
The Family Channel	9,500	53,500,000	WPIX	641	9,200,000
Fox Net	275	1,000,000	WSBK	73	2,000,000
Galavision	249	2,300,000	WWOR	3,013	14,000,000
Headline News	5,506	47,000,000			
Home Shopping Network	1,502	18,000,000	PAY SERVICES	AFFILIATES	SUBS
Home Shopping Network II	400	7,000,000	Cinemax	5,458	6,300,000
HSN Entertainment	N.A.	N.A.	The Disney Channel	7,000	5,665,000
The Inspirational Network	850	6,500,000	Encore	854	2,500,000
International Channel	60	2,700,000	Home Box Office	8,833	17,600,000
KTLA	292	4,800,000	The Movie Channel	3,250	2,800,000
KTVT	481	2,200,000	Showtime	6,000	7,400,000
The Learning Channel	1,196	15,600,000	TV-Japan	5	N.A.
Lifetime	5,400	53,000,000			
Mind Extension University	445	15,500,000			
The Monitor Channel	345	3,924,000			
MTV	7,430	56,600,000			
The Nashville Network	12,259	54,000,000			
National College Television	380	5,983,244			
Nickelodeon	8,635	55,400,000			
Nick At Nite	3,837	50,250,000			
North American Television	8	513,000			
Nostalgia Television	640	12,300,000			

N.A. denotes information not available.

*Includes MMDS/SMATV systems

**Count represents standalone affiliates/subscribers; portions are carried on various regional sports networks

Send updates to: Subscriber Count Database, Cablevision,
825 7th Ave., 6th Floor, New York, N.Y. 10019.
Or fax (212) 887-8585.

D A T A B A S E

NETWORK SUBSCRIBER COUNTS

AUDIO SERVICES	AFFILIATES	SUBS	Home Sports Entertainment	650	2,800,000
AEI Spectra Network	160	5,000,000	KBL Sports Network	67	1,400,000
C-SPAN Audio Network	38	2,419,000	Madison Square Garden Network	216	4,500,000
C-SPAN Audio Network II	23	1,500,000	Meadows Racing Network	17	700,000
Cable Radio Network	71	2,700,000	Midwest Sports Channel	90	610,000
Digital Cable Radio	22	12,228	NewsChannel 8	8	650,000
Digital Music Express	40	N.A.	News 12 Long Island	4	601,000
Digital Planet	4	N.A.	Northwest Cable Sports Network	3	700,000
Japan Cable Radio	7	2,500	Orange County Cable News	8	350,000
KLON	22	760,000	Pennsylvania Cable Network	28	750,000
Moody Bible Institute	47	715,533	Prime Sports/Intermountain West	30	395,300
Satellite Radio Network	237	483,000	Prime Sports/Midwest	6	233,400
Superaudio	300	7,100,000	Prime Sports/Northwest	65	1,500,000
WFMT	143	1,400,000	Prime Sports/Rocky Mountain	135	1,056,000
			Prime Sports/Upper Midwest	4	196,800
TEXT SERVICES	AFFILIATES	SUBS	Prime Ticket	128	4,200,000
AP Business Plus	100	2,000,000	SportsChannel Chicago	79	2,017,612
AP News Cable	185	2,500,000	SportsChannel Cincinnati	14	300,541
AP News Plus	100	2,300,000	SportsChannel Florida	74	1,200,000
Cable SportsTracker	42	1,389,708	SportsChannel Ohio	33	904,000
EPG	96	4,537,815	SportsChannel Philadelphia	41	1,750,000
EPG Jr.	548	582,117	SportSouth	70	1,600,000
Reuters NewsView	127	2,437,000	Sunshine Network	189	3,078,542
Story Vision Network	40	2,100,000			
			REGIONAL		
CHANNEL PROMOTION/ COMPUTER SERVICES	AFFILIATES	SUBS	PAY SERVICES	AFFILIATES	SUBS
NuStar	840	19,000,000	Home Team Sports	205	2,200,000
X*Press	600	14,000	New England Sports Network	171	380,000
			Prism	87	470,000
REGIONAL			Pro-Am Sports	240	750,000
BASIC SERVICES	AFFILIATES	SUBS	SportsChannel Los Angeles	76	150,000
Arizona Sports	1	310,000	SportsChannel New England	164	1,300,000
Atlanta Interfaith	3	225,000	SportsChannel New York	117	1,500,000
Bay Area Religious Channel	6	113,000	SportsChannel Pacific	65	1,700,000
Cable TV Network of New Jersey	34	1,700,000			
CAL-SPAN	42	2,150,000			
The Ecumenical Channel	9	170,000			
Empire Sports Network	15	316,000			
Florida Tourism Channel	20	754,000			

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ANNOUNCED SERVICES

SATELLITE-FED SERVICES	EXPECTED LAUNCH	NON SATELLITE-FED SERVICES	EXPECTED LAUNCH
America's Talk Television	12/91	ACTV	2nd Quarter 1992
Canal Sur (Channel South)	4th Quarter 1991	Main Street	1992
The Cowboy Channel	1st Quarter 1992	TV Shopping Mall	1992
The Crime Channel	3rd Quarter 1992		
FYI-The Consumer Channel	1st Quarter 1992	REGIONAL SERVICES	EXPECTED LAUNCH
Global Village Network	2nd Quarter 1992	Cable Detroit Information Vision	4th Quarter 1991
Golden American Network	12/91	The California Channel	2nd Quarter 1992
The How-To Channel	1992	ChicagoLand Television	3rd Quarter 1992
Renaissance Television	4th Quarter 1992	The News Channel (Chicago)	4th Quarter 1991
The Sci-Fi Channel	4th Quarter 1991	New England News Channel	3/92
Spanish Cable Network	1st/2nd Quarter 1992	New York City News Channel	4/92
Trans Global Network	11/91		
Viva Television Network	4th Quarter 1991		
Vision Television	2nd Quarter 1992		
ZTV	1st Quarter 1992		

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Or fax (212) 887-8585.

D A T A B A S E

NETWORK SUBSCRIBER COUNTS

BASIC SERVICES	AFFILIATES	SUBS			
ACTS Satellite Network	521	9,800,000	QVC Fashion Channel	380	6,000,000
American Movie Classics	2,855	37,000,000	QVC Network	3,900	41,000,000
America's Disability Channel	238	14,200,000	SCOLA/News Of All Nations	36	2,800,000
Arts & Entertainment Network	7,000	52,000,000	Silent Network	238	14,200,000
Black Entertainment Television	2,407	32,400,000	SportsChannel America**	63	2,408,633
Bravo	406	7,500,000	TBS Superstation	14,954	57,400,000
CNBC	3,000	46,000,000	Telemundo	36	1,362,036
Cable News Network	10,963	58,800,000	TNT	7,208	54,993,000
Channel America	13	429,300	The Travel Channel	700	17,500,000
C-SPAN	4,081	54,000,000	Trinity Broadcasting Network	1,015	14,000,000
C-SPAN II	812	25,000,000	Univision	814	11,062,692
Comedy Central	1,293	19,995,000	USA Network	10,100	58,100,000
Country Music Television	2,200	15,721,000	The Vacation Network (new)	N.A.	100,000
Courtroom Television Network	500	6,100,000	ValueVision (new)	11	1,500,000
The Discovery Channel	9,397	56,000,000	VH-1	3,985	43,900,000
E! Entertainment Television	800	20,000,000	Video Jukebox Network	101	9,359,000
ESPN*	24,500	58,950,000	VISN	700	11,500,000
EWTN	849	23,600,000	The Weather Channel	4,550	50,370,000
The Family Channel	9,700	54,600,000	WGN	13,969	34,900,000
Fox Net	275	1,000,000	WPIX	641	9,200,000
Galavision	249	2,300,000	WSBK	91	570,000
Headline News	6,323	47,342,000	WWOR	3,100	14,000,000
Home Shopping Network	1,454	21,000,000			
Home Shopping Network II	471	9,300,000	PAY SERVICES	AFFILIATES	SUBS
HSN Entertainment	N.A.	N.A.	Arab Network of America (new)	1	N.A.
The Inspirational Network	850	5,500,000	Canal Sur (Channel South/new)	1	N.A.
International Channel	73	3,319,647	Cinemax	5,700	6,300,000
KTLA	292	4,800,000	The Disney Channel	7,000	6,300,000
KTVT	481	2,200,000	Encore	854	2,500,000
The Learning Channel	1,255	15,900,000	Home Box Office	9,100	17,300,000
Lifetime	5,465	53,400,000	The Movie Channel	3,250	2,600,000
Mind Extension University	445	17,500,000	Showtime	6,000	7,300,000
The Monitor Channel	418	4,092,000	TV-Japan	6	10,000
MTV	7,430	56,600,000			
The Nashville Network	12,330	54,000,000	N.A. denotes information not available.		
Nickelodeon	8,635	55,400,000	*Includes MMDS/SMATV systems		
Nick At Nite	3,837	50,250,000	**Count represents standalone affiliates/subscribers; portions		
North American Television	8	513,000	are carried on various regional sports networks		
Nostalgia Television	653	13,729,647	Send updates to: Subscriber Count Database, <i>Cablevision</i> , 825		
Prevue Guide	845	26,000,000	7th Ave., 6th Floor, New York, N.Y. 10019.		
			Or fax (212) 887-8585.		

D A T A B A S E

NETWORK SUBSCRIBER COUNTS

TEXT SERVICES	AFFILIATES	SUBS		
AEI Spectra Network	160	5,000,000	Home Sports Entertainment	651 3,060,000
C-SPAN Audio Network	63	2,800,000	KBL Sports Network	67 1,500,000
C-SPAN Audio Network II	42	1,600,000	Madison Square Garden Network	216 4,600,000
Cable Radio Network	125	2,700,000	Meadows Racing Network	17 700,000
Christian Music Network (new)	N.A.	N.A.	Midwest Sports Channel	90 610,000
Digital Cable Radio	46	20,500	New England Cable News (new)	6 828,497
Digital Music Express	36	N.A.	NewsChannel 8	8 650,000
Digital Planet	6	2,000	News 12 Long Island	4 657,400
Japan Cable Radio	7	2,500	Northwest Cable Sports Network	3 700,000
KLON	22	760,000	Orange County Cable News	8 500,000
Moody Bible Institute	48	746,533	Pennsylvania Cable Network	28 750,000
Satellite Radio Network	237	483,000	Prime Sports/Intermountain West	30 400,300
Superaudio	300	7,100,000	Prime Sports/Midwest	6 250,000
WFMT	149	1,400,000	Prime Sports/Northwest	65 1,600,000

TEXT SERVICES	AFFILIATES	SUBS
Cable SportsTracker	42	1,389,708
EPG	96	1,678,000
EPG Jr.	750	564,000
Reuters NewsView	127	2,437,000
TMS Business Plus*	44	1,300,000
TMS News Plus*	65	3,900,000
TMS Sports Plus*	12	500,000
Story Vision Network	40	2,200,000

CHANNEL PROMOTION/ COMPUTER SERVICES	AFFILIATES	SUBS
NuStar	850	22,000,000
X*Press	781	14,000

REGIONAL BASIC SERVICES	AFFILIATES	SUBS
Arizona Sports	1	340,000
Atlanta Interfaith	3	225,000
Bay Area Religious Channel	6	113,000
Cable TV Network of New Jersey	34	1,700,000
CALSPAN	48	2,734,000
The Ecumenical Channel	9	170,000
Empire Sports Network	15	319,000
Florida Tourism Channel	20	754,000

SportsChannel Chicago	79	2,017,612
SportsChannel Cincinnati	18	543,800
SportsChannel Florida	74	1,600,000
SportsChannel Ohio	41	958,400
SportsChannel Philadelphia	41	1,800,000
SportSouth	70	2,500,000
Sunshine Network	189	3,078,542

REGIONAL PAY SERVICES	AFFILIATES	SUBS
Home Team Sports	205	2,225,000
New England Sports Network	171	380,000
Prism	87	470,000
Pro-Am Sports	240	750,000
SportsChannel Los Angeles	76	150,000
SportsChannel New England	164	1,300,000
SportsChannel New York	121	1,516,000
SportsChannel Pacific	69	1,748,900

*previously AP-owned service; now managed by Tribune Media Services

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825 7th Ave., 6th Floor, New York, N.Y. 10019.
Or fax (212) 887-8585.

ANNOUNCED SERVICES

SATELLITE-FED SERVICES	EXPECTED LAUNCH	NON SATELLITE-FED SERVICES	EXPECTED LAUNCH
America's Talk Television	2nd Quarter 1992	ACTV/GTV: Games TV	4th Quarter 1992
The Cartoon Network	10/92	Main Street	1992
The Cowboy Channel	1992	TV Shopping Mall	2nd Quarter 1992
The Crime Channel	1993		
Flix	8/92		
FYI-The Consumer Channel	1992		
The Game Channel	1992-93		
Global Television Network	3rd Quarter 1993		
Global Village Network	2nd Quarter 1992		
Golden American Network	1992		
The How-To Channel	1993		
Renaissance Television	4th Quarter 1992		
The Sci-Fi Channel	9/92		
Spanish Cable Network	4th Quarter 1992		
Telemusica International	4th Quarter 1992		
Trans Global Network	1992		
Vision Television	2nd Quarter 1992		
ZTV	10/92		

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NETWORK SUBSCRIBER COUNTS



BASIC SERVICES	AFFILIATES	SUBSCRIBERS
American Movie Classics	4,100	44,500,000
America's Disability Channel.....	176	15,000,000
Arts & Entertainment Network* ..	8,400	56,088,000
Black Entertainment Television ...	2,745	35,700,000
Bravo	500	10,500,000
CNBC	4,000	48,300,000
Cable News Network*	11,636	61,738,000
The Cartoon Network	426	5,013,000
Channel America.....	13	429,300
C-SPAN	4,336	58,700,000
C-SPAN II	1,004	29,600,000
Comedy Central	2,679	28,000,000
Country Music Television.....	4,880	18,900,000
Courtroom Television Network ...	670	10,600,000
The Discovery Channel	9,756	59,533,000
E! Entertainment Television	1,060	22,000,000
ESPN*	26,200	61,600,000
EWTN.....	1,025	31,000,000
The Family Channel	10,102	57,688,000
Fox Net	701	1,868,466
Galavision.....	329	2,300,000
GEMS Television	1	50,000
Headline News.....	6,700	51,632,000
Home Shopping Network	1,500	21,000,000
Home Shopping Network II	471	13,000,000
The Idea Channel	N.A.	750,000
The Inspirational Network	750	7,000,000
International Channel.....	150	4,200,000
KTLA	343	5,500,000
KTVT	501	2,400,000
The Learning Channel.....	1,558	19,874,000
Lifetime.....	5,865	57,000,000
Mind Extension University	842	24,000,000
MOR Music Television*	120	5,196,431
MTV.....	8,141	57,285,000
The Nashville Network*	13,396	57,400,000
Nickelodeon.....	9,616	58,900,000
Nick At Nite	4,381	51,250,000

BASIC SERVICES	AFFILIATES	SUBSCRIBERS
North American Television	8	513,000
Nostalgia Television.....	764	14,700,000
QVC Fashion Channel	450	7,500,000
QVC Network	4,197	45,000,000
The Sci-Fi Channel	786	11,060,000
SCOLA/News Of All Nations	50	4,500,000
Silent Network	176	15,000,000
SportsChannel America**	63	2,408,633
TBS Superstation*	11,807	60,425,000
Telemundo	477	12,400,000
TNT.....	9,069	58,950,000
The Travel Channel	735	17,500,000
Trinity Broadcasting Network ...	2,200	18,000,000
Univision	609	11,062,692
USA Network*	12,000	60,124,000
ValueVision	55	5,000,000
VH-1	5,304	47,400,000
Video Jukebox Network/The Box* ..	170	14,000,000
VISN/ACTS	1,249	20,000,000
The Weather Channel.....	4,925	53,381,000
Worship	N.A.	N.A.
WGN*	14,354	38,100,000
WPIX	638	9,700,000
WSBK	91	577,000
WWOR	3,100	13,500,000
Z Music	115	2,500,000

PAY SERVICES	AFFILIATES	SUBSCRIBERS
Canal Sur (Channel South)	3	9,000
Cinemax	5,900	6,300,000
The Disney Channel	7,000	7,080,000
Encore	1,100	3,900,000
Flix	N.A.	125,000
Home Box Office	9,300	19,900,000
MBC	N.A.	300,000
The Movie Channel.....	3,250	2,600,000
Showtime	6,000	7,300,000
TV-Japan	12	10,000

N.A. denotes information not available.

*Includes low-power television/MMDS/SMATV systems

**Count represents standalone affiliates/subscribers; portions are carried on various regional sports networks

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NETWORK SUBSCRIBER COUNTS



AUDIO SERVICES AFFILIATES SUBSCRIBERS

AEI Spectra Network	160	5,000,000
C-SPAN Audio Network	77	2,800,000
C-SPAN Audio Network II	51	1,600,000
Cable Radio Network	125	2,700,000
Digital Cable Radio	140	60,000
Digital Music Express	450	200,000
Japan Cable Radio	7	2,500
KJAZ Cable Radio		
Network (new)	11	N.A.
KLON	14	800,000
Moody Bible Institute	48	750,591
Satellite Radio Network	237	483,000
Superaudio	305	7,500,000
WFMT	122	900,000

TEXT SERVICES AFFILIATES SUBSCRIBERS

Cable SportsTracker	42	1,389,708
EPG	96	1,678,000
EPG Jr.	750	564,000
Reuters NewsView	127	2,437,000
TMS Business Plus	44	1,900,000
TMS News Plus	70	3,900,000
TMS Sports Plus	12	500,000
Story Vision Network	40	2,200,000

CHANNEL PROMOTION/ GUIDES/INTERACTIVE SERVICES

AFFILIATES	SUBSCRIBERS
Cable TeleGuide	75 2,000,000

CHANNEL PROMOTION/ GUIDES/INTERACTIVE SERVICES

AFFILIATES	SUBSCRIBERS
Main Street	2 85,000
Prevue Channel*	850 28,000,000
StarNet	960 23,000,000
X*Press	1,000 14,000

REGIONAL BASIC

SERVICES AFFILIATES SUBSCRIBERS

Arizona Sports	2	380,000
Atlanta Interfaith	3	225,000
Bay Area Religious Channel	6	113,000
Cable TV Network of N.J.	34	1,700,000
The California Channel**	48	2,734,000
Chicagoland		
Television News	105	650,000
The Ecumenical Channel	9	170,000
Empire Sports Network	22	400,000
Florida Tourism Channel	20	754,000
Home Sports Entertainment	650	3,400,000
KBL Sports Network	225	1,900,000
Madison Square Garden		
Network	229	5,000,000
Meadows Racing Network	17	700,000
Midwest Sports Channel	450	985,000
New England Cable News	37	850,050
New York 1 News	6	902,000
NewsChannel 8	8	720,000
News 12 Long Island	1	585,000
Orange County NewsChannel	8	510,000

REGIONAL BASIC

SERVICES AFFILIATES SUBSCRIBERS

Pennsylvania Cable Network	28	750,000
Prime Sports/Intermountain	112	465,237
Prime Sports/Midwest	47	284,799
Prime Sports/Rocky Mt.	186	1,222,735
Prime Sports/Upper Midwest	24	302,638
Prime Ticket	175	4,200,000
SportsChannel Chicago	210	2,245,472
SportsChannel Cincinnati	65	1,223,819
SportsChannel Florida	91	1,600,000
SportsChannel Ohio	44	1,157,000
SportsChannel Philadelphia	66	1,900,000
SportSouth	393	3,200,000
Sunshine Network	166	3,230,000

REGIONAL PAY

SERVICES AFFILIATES SUBSCRIBERS

Home Team Sports	250	2,500,000
New England Sports		
Network	185	400,000
Prism	75	400,000
Pro-Am Sports	250	800,000
SportsChannel New England	215	1,400,000
SportsChannel New York	126	1,516,000
SportsChannel Pacific	55	2,100,000

*formerly Prevue Guide **formerly CAL-SPAN
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N.Y. 10019. Or fax (212) 887-8585.

ANNOUNCED SERVICES

SATELLITE-FED SERVICES EXPECTED LAUNCH

Americana Television Network	4/94
ATV: Advertising Television	2nd Quarter 1994
BBC/Reuters/Telemundo	
News Service	4th Quarter 1993
CNN International	4th Quarter 1993
The Crime Channel	1/94
Encore/Universal Pay Network	1/94
ESPN 2	11/93
Fitness & Exercise Television	2nd Quarter 1994
Fox Channel	4th Quarter 1993
The Game Channel	4th Quarter 1993
The Game Show Channel	2nd Quarter 1994
Gaming & Entertainment Network	3/94
Global Mind Network	11/93
Global Village Network	1993
The Golf Channel	4/94
H-TV	4th Quarter 1994
HBO En Espanol	10/93
The History Network	3rd Quarter 1994
Horizons TV	4th Quarter 1994
The How-To Channel	1995
Jones Computer Network	1st Quarter 1994
L/Official TeleFashion	
Channel	4th Quarter 1993

SATELLITE-FED SERVICES EXPECTED LAUNCH

The Military Channel	1/94
MTV Latino	10/93
Musivision	1994
National Community	
Network	4th Quarter 1993
New Culture Network	4th Quarter 1994
NewSport Television	
(revamped SportsChannel America)	10/93
Ole TV Network	2nd Quarter 1993
Ovation	4th Quarter 1994
Planet Central Television	4th Quarter 1994
RecoveryNet	10/93
Romance Classics	2/94
Style TV	1994
The Talk Channel	4th Quarter 1994
Talk Television Network	1st Quarter 1994
Television Food Network	11/93
TRAX	1/95
Turner Classic Movies	2nd Quarter 1994
TV Asia	7/93
TV Macy's	3rd Quarter 1994
World African Network	6/94
XTV: Independent Programming	
Network	2nd Quarter 1994

NON-SATELLITE-FED SERVICES

EXPECTED LAUNCH

IT Network/The Interactive Channel	1/94
The Sega Channel	1st Quarter 1994

REGIONAL SERVICES

EXPECTED LAUNCH

California News Channel	1993
Prime Ticket/La Cadena	
Deportiva	4th Quarter 1993

PPV SERVICES

SERVICE SYSTEMS ADDRESSABLE SUBSCRIBERS

Action Pay-Per-View	170	5,000,000
Cable Video Store	160	2,300,000
Continuous Hits (VC)	38	1,300,000
Hot Choice	200	5,000,000
Playboy Television	239	8,500,000
Request Television	745	11,200,000
Request Television II	280	5,200,000
Spice	175	6,000,000
TheaterVision (new)	N.A.	N.A.
Viewer's Choice	522	11,000,000

DEC 19 1995

CABLE DATA CORPORATION

P.S. Ex. 39 -X

NC.256 P.2

CALL SIGN	YR PD	SS-SYS DIST-TOT	SS-SUBS D-FULL-TOT
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KTVU	90-1	33	652,404
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KTVU	90-2	30	638,253
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KTVU	91-1	29	452,023
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KTVU	91-2	28	447,376
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KTVU	92-1	29	424,997
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KTVU	92-2	27	420,734
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CABLE DATA CORP

DEC.19.1995 2:30PM

P.S. Ex. 39-X

Carriage of KTVU, Oakland By Form 1, 2, 3 Cable Systems, 1990-1992¹

	Form 1		Form 2		Form 3 Total, Local and Distant		Form 3 Distant Only	
	<u>Systems</u>	<u>Subs</u>	<u>Systems</u>	<u>Subs</u>	<u>Systems</u>	<u>Subs</u>	<u>Systems</u>	<u>Subs</u>
1990-1	77	57,633	37	62,532	95	2,132,387	33	652,404
1990-2	83	58,633	39	76,661	91	2,143,467	30	638,253
1991-1	90	33,154	39	76,900	89	1,970,236	29	452,023
1991-2	96	60,333	41	80,987	88	1,968,363	28	447,376
1992-1	102	62,415	41	73,901	90	2,002,531	29	424,997
1992-2	95	61,454	40	72,875	88	1,992,025	27	411,734

¹ Source: Cable Data Corporations, August 3, 1994

P.S. Ex.
Cable Data Corporation

Carriage of KTVU As A "Distant Signal" By Form 3 Cable System¹

CALL SIGN	YR PD	SS-SYS DIST-TOT	SS-SUBS D-FULL-TOT
KTVU	90-1	33	652,404
KTVU	90-2	30	638,253
KTVU	91-1	29	452,023
KTVU	91-2	28	447,376
KTVU	92-1	29	424,997
KTVU	92-2	27	411,734

¹ Source: Cable Data Corporations, December 19, 1995

ROSEBURG, OR / FALCON

SUBS	RATE	GR	TOTAL ROY PD	SIGNAL CARRIAGE														
				K29AX	KATU (A)	KDRV (A)	KEZI (A)	KGW (N)	KOBI (N)	KOIN (C)	KPIC (N)	KPIX (C)	KPTV (I)	KSYS (E)	KTUU (F)	KTXL (F)	KVAL (C)	WTBS (I)
90/1	8,059	\$19.95	\$1,006,063	\$28,642	N/C	D	L	L	D	L	D	L	D	L	D	D	N/C	D
90/2	7,966	\$13.50	\$1,007,537	\$20,351	N/C	N/C	L	L	N/C	L	N/C	L	D	L	D	D	N/C	D
91/1	7,830	\$20.60	\$1,010,898	\$20,410	N/C	N/C	L	L	N/C	L	N/C	L	D	L	D	N/C	L	D
91/2	8,081	\$20.00	\$988,052	\$19,949	N/C	N/C	L	L	N/C	L	N/C	L	D	L	D	N/C	L	D
92/1	8,174	\$20.56	\$1,048,244	\$21,164	N/C	N/C	L	L	N/C	L	N/C	L	D	L	D	N/C	N/C	D
92/2	8,107	\$20.95	\$1,042,618	\$21,050	L	N/C	L	L	N/C	L	N/C	L	D	L	D	N/C	N/C	D

P.S. Ex. 38-X

MODE:F ACTION: _____
01 35527

SYS-ID
OR R500

ACCT
901

REMIT
225501

DATE
08/29/90

OWNER NAME
02 COOKE CABLEVISION INC

COMMUNITY SERVED
ROSEBURG

SUBSCRIBERS RATE COMMENT
8,059 19.95

03 OTHER CITIES
Douglas Co

	CALI	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04	KATU ✓	PORTLAND	OR	02	N A	D		.250	D		
05	KDRV ✓	MEDFORD	OR	12	N A	L					
06	KEZI ✓	EUGENE	OR	09	N A	L					
07	KGW ✓	PORTLAND	OR	08	N N	D		.250	D		
08	KOBI ✓	MEDFORD	OR	05	N N	L					
09	KOIN ✓	PORTLAND	OR	06	N C	D		.250	D		
10	KPIC ✓	ROSEBURG	OR	04	N N	L					
11	KPIX ✓	SAN FRANCISCO	CA	05	N C	D		.250	D		
06	KPTV ✓	PORTLAND	OR	12	I	D		1.000	D		
07	KSYS ✓	MEDFORD	OR	08	E	L					
08	KTVU ✓	OAKLAND	CA	02	I F	D		1.000	D		
09	KTXL ✓	SACRAMENTO	CA	40	I F	D		1.000	D		
10	WTBS	ATLANTA	GA	17	I	D		1.000	D		
11											

5.000

	RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS	TV	TOT	MKT	PD'S
12	1,006,063	28,642	0	0	28,642	14	25	3	0	

Menu: <Ctrl R-Shift>

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 35527

SYS-ID
OR R500

ACCT
902

REMIT
232448

DATE
03/01/91

OWNER NAME
02 FALCON COMMUNICATIONS CORP

COMMUNITY SERVED
ROSEBURG

SUBSCRIBERS RATE COMMENT
7,966 13.50 H

03 OTHER CITIES
Douglas Co

	CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04	KDRV	MEDFORD	OR	12	N A	L					
05	KEZI	EUGENE	OR	09	N A	L					
06	KOBI	MEDFORD	OR	05	N N	L					
07	KPIC	ROSEBURG	OR	04	N N	L					
08	KPTV	PORTLAND	OR	12	I	D		1.000	D		
09	KSYS	MEDFORD	OR	08	E	L					
10	KTVU	OAKLAND	CA	02	I F	D		1.000	D		
11	KVAL	EUGENE	OR	13	N C	L					
10	WTBS	ATLANTA	GA	17	I	D		1.000	D		
11											

3.000

	RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS	TV	TOT	MKT	PD'S
12	1,007,937	20,351	0	0	20,351	10	15	3	0	

Menu: <Ctrl R-Shift>

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 35527

SYS-ID
OR R500

ACCT
911

REMIT
246533

DATE
08/29/91

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 FALCON COMMUNICATIONS CORP ROSEBURG 7,830 20.00

03 OTHER CITIES
Douglas Co

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KDRV	MEDFORD	OR	12	N A	L					
05 KEZI	EUGENE	OR	09	N A	L					
06 KORT	MEDFORD	OR	05	N N	L					
07 KPIC	ROSEBURG	OR	04	N N	L					
08 KPTV	PORTLAND	OR	12	I	D		1.000	D		
09 KSYS	MEDFORD	OR	08	E	L					
10 KTVU	OAKLAND	CA	02	I F	D		1.000	D		
11 KVAL	EUGENE	OR	13	N C	L					
10 WTBS	ATLANTA	GA	17	I	D		1.000	D		
11										

3.000

RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS TV TOT	MKT	PD'S
12 1,010,898	20,410	0	0	20,410	09 26	3	0

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 35527

SYS-ID
OR R500

ACCT
912

REMIT
260049

DATE
03/02/92

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 FALCON COMMUNITY CABLE ROSEBURG 8,081 20.00

03 OTHER CITIES
Douglas Co

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KDRV	MEDFORD	OR	12	N A	L					
05 KEZI	EUGENE	OR	09	N A	I					
06 KOB	MEDFORD	OR	05	N N	L					
07 KPIC	ROSEBURG	OR	04	N N	L					
08 KPTV	PORTLAND	OR	12	I	D		1.000	D		
09 KSYS	MEDFORD	OR	08	E	L					
10 KTVU	OAKLAND	CA	02	I F	D		1.000	D		
11 WTBS	ATLANTA	GA	17	I	D		1.000	D		

3.000

RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS TV TOT	MKT	PD'S
12 988,052	19,949	0	0	19,949	09 0	3	0

ENTER '1/2' TO BEGIN PROCESSING
Menu: (Ctrl R-Shift)

38400 0N1

IBM 3101 Online

MODE:F ACTION: _____

SYS-ID

ACCT

REMIT

DATE

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
 02 FALCON COMMUNITY VENTURES I ROSEBURG 8,174 20.56

03 OTHER CITIES
 Douglas Co

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KDRV	MEDFORD	OR	12	N A	L					
05 KEZI	EUGENE	OR	09	N A	L					
06 KOBI	MEDFORD	OR	05	N N	L					
07 KPIC	ROSEBURG	OR	04	N N	L					
08 KPTV	PORTLAND	OR	12	T	D		1.000	D		
09 KSYS	MEDFORD	OR	08	E	L					
10 KTVU	OAKLAND	CA	02	I F	D		1.000	D		
11 WTBS	ATLANTA	GA	17	I	D		1.000	D		
							3.000			

RECEIPTS	ROY-BASE	ROY-375	ROY SYN	ROY TOTAL	CHANNELS TV	TOT	MKT	PD'S
12 1,048,244	21,164	0	0	21,164	09	25	3	0
							3	

ENTER '1/2' TO BEGIN PROCESSING
 Menu: <Ctrl R-Shift>

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
 01 35527

SYS-ID
 OR R500

ACCT
 922

REMIT
 292954

DATE
 03/01/93

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
 02 FALCON COMMUNITY VENTURES I ROSEBURG 8,107 20.95

03 OTHER CITIES
 Douglas Co

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 K29AX	WINSTON	OR	29	L	L					
05 KDRV	MEDFORD	OR	12	N A	L					
06 KEZI	EUGENE	OR	09	N A	L					
07 KOBI	MEDFORD	OR	05	N N	L					
08 KPIC	ROSEBURG	OR	04	N N	L					
09 KPTV	PORTLAND	OR	12	I	D		1.000	D		
10 KSYS	MEDFORD	OR	08	E	L					
11 KTVU	OAKLAND	CA	02	I F	D		1.000	D		
10 WTBS	ATLANTA	GA	17	I	D		1.000	A		
11							3.000			

RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS TV	TOT	MKT	PD'S
12 1,042,618	21,050	0	0	21,050	09	27	3	0
							3	

Menu: <Ctrl R-Shift>

38400 8N1

IBM 3101 Online

40

THE

SIGNAL CARRIAGE

KMTF

MODE:F ACTION: _____
01 28010

SYS-ID
CA M100

ACCT
901

REMIT
218465

DATE
08/29/90

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 NORTHLAND CABLE TELEVISION INCMARIPOSA 546 16.75

03 OTHER CITIES

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KAIL	FRESNO	CA	53	I	L					
05 KFSN	FRESNO	CA	30	N C	L					
06 KJEO	FRESNO	CA	47	N C	L					
07 KMPH	VISALIA	CA	26	I F	L					
08 KMTF KVPT	FRESNO	CA	18	E	L					
09 KSEE	FRESNO	CA	24	N N	L					
10 KTVU	OAKLAND	CA	02	I F	L					
11 KTXL	SACRAMENTO	CA	40	I F	L					
10 WTBS	ATLANTA	GA	17	I	L					

11
RECEIPTS ROY-BASE ROY-375 ROY-SYN ROY TOTAL CHANNELS TV TOT MKT PD'S
12 60,025 28 0 0 28 09 12 4 0
4

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 28010

SYS-ID
CA M100

ACCT
902

REMIT
230937

DATE
02/22/91

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 NORTHLAND CABLE TELEVISION INCMARIPOSA 548 17.75

03 OTHER CITIES

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KAIL	FRESNO	CA	53	I	L					
05 KFSN	FRESNO	CA	30	N C	L					
06 KJEO	FRESNO	CA	47	N C	L					
07 KMPH	VISALIA	CA	26	I F	L					
08 KMTF KVPT	FRESNO	CA	18	E	L					
09 KSEE	FRESNO	CA	24	N N	L					
10 KTVU	OAKLAND	CA	02	I F	L					
11 KTXI	SACRAMENTO	CA	40	I F	L					
10 WTBS	ATLANTA	GA	17	I	L					

11
RECEIPTS ROY-BASE ROY-375 ROY-SYN ROY TOTAL CHANNELS TV TOT MKT PD'S
12 67,362 28 0 0 28 09 12 4 0
4

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 28010

SYS-ID
CA M100

ACCT
911

REMIT
245321

DATE
09/29/91

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 NORTHLAND CABLE TELEVISION INCMARIPOSA 541 18.95

03 OTHER CITIES

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KAIL	FRESNO	CA	53	I	L					
05 KFSN	FRESNO	CA	30	N C	L					
06 KJEO	FRESNO	CA	47	N C	L					
07 KMPH	VISALIA	CA	26	I F	L					
08 KMTF KVPT	FRESNO	CA	18	E	L					
09 KSEE	FRESNO	CA	24	N N	L					
10 KTVU	OAKLAND	CA	02	I F	L					
11 KTXL	SACRAMENTO	CA	40	I F	L					
10 WTBS	ATLANTA	GA	17	I	L					
11										

RECEIPTS ROY-BASE ROY-375 ROY-SYN ROY TOTAL CHANNELS
12 68,961 0 0 0 28 .000
TV TOT MKT PD'S
09 15 4 0
4

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 28010

SYS-ID
CA M100

ACCT
912

REMIT
260091

DATE
02/27/92

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 NORTHLAND CABLE TELEVISION INCMARIPOSA 529 18.95

03 OTHER CITIES

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KAIL	FRESNO	CA	53	I	L					
05 KFSN	FRESNO	CA	30	N C	L					
06 KJEO	FRESNO	CA	47	N C	L					
07 KMPH	VISALIA	CA	26	I F	L					
08 KSEE	FRESNO	CA	24	N N	L					
09 KTVU	OAKLAND	CA	02	I F	L					
10 KTXL	SACRAMENTO	CA	40	I F	L					
11 KVPT	FRESNO	CA	18	E	L					
10 WTBS	ATLANTA	GA	17	I	L					
11										

RECEIPTS ROY-BASE ROY-375 ROY-SYN ROY TOTAL CHANNELS
12 70,493 0 0 0 28 .000
TV TOT MKT PD'S
09 15 4 0
4

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 28010

SYS-ID
CA M100

ACCT
921

REMIT
274024

DATE
08/25/92

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 NORTHLAND CABLE TELEVISION INCMARIPOSA 547 20.45

03 OTHER CITIES

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KAIL	FRESNO	CA	53	I	L					
05 KFSN	FRESNO	CA	30	N C	L					
06 KJEO	FRESNO	CA	47	N C	L					
07 KMPH	VISALIA	CA	26	I F	L					
08 KSEE	FRESNO	CA	24	N N	L					
09 KTVU	OAKLAND	CA	02	I F	L					
10 KTXL	SACRAMENTO	CA	40	I F	L					
11 KVPT	FRESNO	CA	18	E	L					
09 WGN	CHICAGO	IL	09	I	L					
10 WTBS	ATLANTA	GA	17	I	L					
11										

.000.....

RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS	TV	TOT	MKT	PD'S
12 73,387	0	0	0	28	10	18	4	0	4

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

MODE:F ACTION: _____
01 28010

SYS-ID
CA M100

ACCT
922

REMIT
289234

DATE
02/24/93

OWNER NAME COMMUNITY SERVED SUBSCRIBERS RATE COMMENT
02 NORTHLAND CABLE TELEVISION INCMARIPOSA 556 20.45

03 OTHER CITIES

CALL	CITY	ST	CH	TYP	BOC	ABC	DSE	PER	F	EXE
04 KAIL	FRESNO	CA	53	I	L					
05 KFSN	FRESNO	CA	30	N C	L					
06 KJEO	FRESNO	CA	47	N C	L					
07 KMPH	VISALIA	CA	26	I F	L					
08 KSEE	FRESNO	CA	24	N N	L					
09 KTVU	OAKLAND	CA	02	I F	L					
10 KTXL	SACRAMENTO	CA	40	I F	L					
11 KVPT	FRESNO	CA	18	E	L					
09 WGN	CHICAGO	IL	09	I	L					
10 WTBS	ATLANTA	GA	17	I	L					
11										

.000

RECEIPTS	ROY-BASE	ROY-375	ROY-SYN	ROY TOTAL	CHANNELS	TV	TOT	MKT	PD'S
12 79,187	0	0	0	62	10	18	4	0	4

Menu: (Ctrl R-Shift)

38400 8N1

IBM 3101 Online

PER CABLE & STATION ATLAS	JACKSONVILLE, FL	ELKHART, IN
LOCAL PBS STATIONS	WJCT (J'VILLE, FL) WJEB (J'VILLE, FL)	WNIT (SOUTH BEND, IN)
DISTANT PBS STATION		WTTW (CHICAGO)
PARTIALLY LOCAL/PARTIALLY DISTANT PBS STATION	WUFT (GAINESVILLE, FL)	

ST	SYSTEM	OWNER	SIGNAL CARRIAGE [LOCAL (L) or DISTANT (D)]					
			90/1	90/2	91/1	91/2	92/1	92/2
FL	JACKSONVILLE – PORTSIDE MHP (F1)	FLORIDA ATLANTIC CABLE TV	WJCT (L)	WJCT (L)	WJCT (L)	WJCT (L)	WJCT (L)	WJCT (L)
FL	JACKSONVILLE (F3)	CONTINENTAL CBV	WJCT (L) WUFT (L)	WJCT (L) WUFT (L)	WJCT (L) WUFT (L)	WJCT (L) WUFT (L)	WJCT (L) WUFT (L)	WJCT (L) WUFT (L)
FL	JACKSONVILLE BEACH (F3)	CONTINENTAL CBV	WJCT (L) WUFT (PD)	WJCT (L) WUFT (PD)	WJCT (L) WUFT (PD)	WJCT (L) WUFT (PD)	WJCT (L) WUFT (PD)	WJCT (L) WUFT (PD)
IN	BREMEN (F2)	TRIAX ASSOCS.	WNIT (L)	WNIT (L)	WNIT (L)	WNIT (L)	WNIT (L)	WNIT (L)
IN	BRISTOL (F2)	HERITAGE CBV	WNIT (L)	WNIT (L)	WNIT (L)	WNIT (L)	WNIT (L)	WNIT (L)
IN	ELKHART – N.POINT (F1)	EDWARD ROSE ASSOC.	BEGAN OPERATION 91/2			NO PBS	NO PBS	NO PBS
IN	ELKHART – OLD FARM (F1)	EDWARD ROSE ASSOCS	WNIT (L)	WNIT (L)	WNIT (L)	N/C	N/C	N/C
IN	ELKHART (F3)	HERITAGE CBV	WNIT (L) WTTW (D)	WNIT (L) WTTW (D)	WNIT (L) WTTW (D)	WNIT (L) N/C	WNIT (L) N/C	WNIT (L) N/C

	NUMBER OF SUBSCRIBERS				
	1989	1990	1991	1992	1993
CABLE NETWORK					
ESPN	54,800,000	56,265,000	59,195,000	58,950,000	61,600,000
SPORTSCHANNEL AMERICA	2,100,000	2,320,000	2,320,000	2,408,633	2,408,633
ARIZONA SPORTS PRGMG NETWORK	210,000	310,000	310,000	340,000	380,000
EMPIRE SPORTS NETWORK			316,000	319,000	400,000
KBL SPORTS NETWORK			1,400,000	1,500,000	1,900,000
MADISON SQUARE GARDEN NETWORK	3,400,000	4,300,000	4,500,000	4,600,000	5,000,000
MEADOWS RACING NETWORK	600,000	700,000	700,000	700,000	700,000
MIDWEST SPORTS CHANNEL	275,000	275,000	610,000	610,000	985,000
NIAGARA FRONTIER SPORTS NETWORK	800,000	800,000			
NORTHWEST CABLE SPORTS NETWORK	700,000		700,000	700,000	
PACIFIC SPORTS CHANNEL NETWORK		1,100,000			
PRIME SPORTS NETWORK	300,000				
PRIME SPORTS NETWORK INTERMOUNTAIN WEST		300,000	395,300	400,300	465,237
PRIME SPORTS NETWORK MIDWEST		30,000	233,400	250,000	284,799
PRIME SPORTS NETWORK ROCKY MOUNTAIN		780,000	1,056,000	1,200,000	1,222,735
PRIME SPORTS NETWORK UPPER MIDWEST		108,000	196,800	340,000	302,638
PRIME SPORTS NETWORK NORTHWEST		1,100,000	1,500,000	1,600,000	
PRIME TICKET	3,800,000	4,200,000	4,200,000	4,300,000	4,200,000
SPORTSCHANNEL BAY AREA		1,691,000			
SPORTSCHANNEL CHICAGO	1,507,270		2,017,612	2,017,612	2,245,472
SPORTSCHANNEL CINCINNATI		70,000	300,541	543,800	1,223,819
SPORTSCHANNEL OHIO	280,000	650,000	904,000	958,400	1,157,000
SPORTSCHANNEL PHILADELPHIA		1,300,000	1,750,000	1,800,000	1,900,000
SPORTSOUTH		1,000,000	1,600,000	2,500,000	3,200,000
SUNSHINE NETWORK	2,800,000	2,900,000	3,078,542	3,078,542	3,230,000
HOME SPORTS ENTERTAINMENT	1,000,000	2,400,000	2,800,000	3,060,000	3,400,000
HOME TEAM SPORTS	1,200,000	1,800,000	2,200,000	2,225,000	2,500,000
NEW ENGLAND SPORTS NETWORK	317,201	380,000	380,000	380,000	400,000
PRISM	427,000	470,000	470,000	470,000	400,000
PRO-AM SPORTS	523,000	625,000	750,000	750,000	800,000
SPORTSCHANNEL FLORIDA	650,000	950,000	1,200,000	1,600,000	1,600,000
SPORTSCHANNEL LOS ANGELES	125,000	125,000	150,000	150,000	
SPORTSCHANNEL NEW ENGLAND	1,028,431	1,200,000	1,300,000	1,300,000	1,400,000
SPORTSCHANNEL NEW YORK	1,300,000	1,300,000	1,500,000	1,516,000	1,516,000
SPORTSCHANNEL PACIFIC			1,700,000	1,748,900	2,100,000
TOTAL	78,142,902	89,449,000	99,733,195	102,316,187	106,921,333

Source: CableVision Magazine "Database" Reports

"MAJOR SPORTS" SHARE OF "TIME" DURING
"SWEEP WEEKS, 1991" ON INDEPENDENT STATIONS

	<u>% OF 1/4 HOURS</u>	<u>% OF "TIME"</u>
KBHK, San Francisco	0	0
KCAL, Los Angeles	174	1.9
KCOP, Los Angeles	32	0.4
KHTV, Houston	112	1.3
KICU, San Jose	267	3.0
KMEX, Los Angeles	0	0
KMSP, Minneapolis	134	1.5
KOFY, San Francisco	17	0.2
KPLR, St. Louis	364	4.1
KPTV, Portland	110	1.2
KSHB, Kansas City	16	0.2
KSTW, Tacoma	296	3.3
KTLA, Los Angeles	200	2.2
KTTV, Los Angeles	177	2.0
KTVT, Ft. Worth	360	4.0
KTVU, Oakland	246	2.7
KTXL, Sacramento	0	0
KWGN, Denver	60	0.7
KXTX, Dallas	72	0.8
WAGA, Atlanta	8	0.2
WBFF, Baltimore	122	1.4
WDCA, Washington	414	4.7
WFLD, Chicago	0	0
WFXT, Boston	140	1.6
WGBS, Philadelphia	92	1.0
WGN, Chicago	706	7.9
WGNX, Atlanta	60	0.7
WKBD, Detroit	320	3.6
WLTW, Miami	0	0
WLVI, Cambridge	0	0
WNJU, Newark	8	0.1
WNYW, New York	0	0
WPGH, Pittsburgh	0	0
WPHL, Philadelphia	186	2.1
WPIX, New York	182	2.0
WSBK, Boston	492	5.6
WTBS, Atlanta	602	6.7
WTOG, St. Petersburg	36	0.4
WTTG, Washington	48	0.5
WTTV, Bloomington, IN	220	2.5
WTFX, Philadelphia	288	3.2
WUAB, Lorain, OH	216	2.4
WVTV, Milwaukee	88	1.0
WWOR, New York	314	3.5
WXIX, Cincinnati	64	0.7
WXTV, Paterson	0	0

**COMPARISON 1990 BORTZ SURVEY PBS RESPONSES
WITH 1990 ROYALTY PAYMENTS FOR PBS**

<u>NO.</u>	<u>CALL SIGN</u>	<u>CALL SIGN</u>	<u>CALL SIGN</u>	<u>CALL SIGN</u>	<u>CALL SIGN</u>	<u>CALL SIGN</u>	<u>CALL SIGN</u>	<u>PBS DSEs</u>	<u>TOTAL DSEs</u>	<u>% PBS DSEs</u>	<u>PBS VALUE</u>	<u>INDEX</u>
6	WTBS	WGN	KWET					0.25	2.25	11.11%	3%	27
153	WTBS	WGN	WWOR	WTTW	WHA	WFLD		0.50	4.50	11.11%	5%	45
133	WTBS	WGN	KSMQ	KITN				0.25	3.25	7.69%	5%	65
151	WTBS	WNET	WSBK					0.25	2.25	11.11%	10%	90
215	WTBS	WTXX	WTIC	WNYE	WNJU	WVIA	WHCT	0.50	5.50	9.09%	10%	110
200	WTBS	WGN	WHA	WWOR				0.25	3.25	7.69%	10%	130
224	WTBS	WHMM	WWOR					0.25	2.25	11.11%	17%	153
195	WTBS	WGN	WHA	WTTW	WFLD	WWOR		0.50	4.25	11.76%	20%	170
54	WTBS	WCCB	WUNG					0.25	2.25	11.11%	20%	180
124	WGBH	WPIX	WLVI	WSBK				0.25	3.25	7.69%	15%	195
13	WTBS	WCIA	WFLD	WTTW				0.25	2.50	10.00%	25%	250
84	WTBS	WGN	KOKI	KSHB	KOED			0.25	4.25	5.88%	15%	255
168	WTBS	KXTX	KERA	WGN	KTVT			0.25	4.25	5.88%	15%	255
198	WTBS	KUHT	KTXH					0.25	2.25	11.11%	30%	270
186	WTBS	KCET						0.25	1.25	20.00%	60%	300
22	WTBS	KXTX	KTXA	KERA	KDAF	KDFI		0.25	5.25	4.76%	15%	315
123	WTBS	WGN	KITN	KTMA	KTCI			0.25	4.25	5.88%	20%	340
78	WWOR	WPIX	WVIA					0.25	2.25	11.11%	50%	450
98	KWHY	KCET	KTLA	KCAL	KTTV	KCOP		0.25	5.25	4.76%	40%	840

COMPARISON 1991 BORTZ SURVEY PBS RESPONSES WITH 1991 ROYALTY PAYMENTS FOR PBS

NO.	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	PBS DSEs	TOTAL DSEs	% PBS DSEs	PBS VALUE	INDEX
159	WTBS	KARK	KOED	WGN						0.25	2.50	10.00%	1%	10
166	WTBS	CKSH	WMEA	WSBK						0.25	3.25	7.69%	2%	26
124	WTBS	WGN	KSAX	KMSP	KWCM	KFME				0.50	3.75	13.33%	5%	38
188	KCBS	KDHY	KCET	KNBC	KTLA	KABC	KCAL	KTTV		0.25	4.00	6.25%	2.5%	40
116	WTBS	WGN	WMVS							0.25	2.25	11.11%	5%	45
342	WTBS	WGN	WTTW	WHA						0.50	2.50	20.00%	10%	50
57	WTBS	WGN	WCLP	WAGA	WGNX					0.25	3.50	7.14%	5%	70
106	WTBS	WGN	WWOR	WTTW	WHA	WFLD				0.50	4.50	11.11%	8%	72
136	WTBS	WGN	WWOR	WTTW	WHA	WFLD				0.50	4.50	11.11%	8%	72
53	WTBS	WFUM	WGN							0.25	2.25	11.11%	10%	90
168	WTBS	WPBT								0.25	1.25	20.00%	20%	100
60	WTBS	KXAN	KLRU	KVUE	WGN					0.25	2.75	9.09%	10%	110
207	WTBS	WGN	WPBT	WTOG						0.25	3.25	7.69%	10%	130
38	WTBS	WGN	WBGU							0.25	2.25	11.11%	15%	135
343	WTBS	KRMA	WGN							0.25	2.25	11.11%	15%	135
239	WTBS	WGBH	WSBK	CKSH	WCBB					0.50	3.50	14.29%	20%	140
214	WTBS	KCET								0.25	1.25	20.00%	30%	150
350	WTBS	WCNC	WUNG	WGN	WCCB	WRAL				0.25	3.75	6.67%	10%	150
293	WTBS	WFRV	WGN	WKBT	WMVS	WLUK	WCGV	WWOR		0.25	5.00	5.00%	8%	160
162	KCNC	KMGH	KWGN	KUSA	KRMA					0.25	2.00	12.50%	20%	160
27	WTBS	WTMJ	WITI	WMVS	WISN	WGN	WWOR			0.25	4.00	6.25%	10%	160
144	WTBS	WFSB	WTXX	WTIC	WMT	WNJU	WMA	WHCT		0.25	5.75	4.35%	7%	161
15	WTBS	KGAN	WMSN	KWWL	WGN	WKOW	WHA	WMTV		0.25	4.25	5.88%	10%	170
45	WTBS	WDCN	WZTV	WGN	WWOR					0.25	4.25	5.88%	10%	170
229	WTBS	WLIW	WTIC	WNET	WHSI					0.50	3.50	14.29%	25%	175
299	WTBS	KLRN	WGN							0.25	2.25	11.11%	20%	180
219	WTBS	WWOR	WNJS							0.25	2.25	11.11%	20%	180
102	WTBS	WHA	WTTW	WGN	WWOR	WFLD	W43AV			0.50	4.50	11.11%	20%	180
68	WTBS	WPBT	WESH	WWOR						0.25	2.50	10.00%	20%	200
114	KCET	KCBS	KNBC	KTLA	KABC	KCAL	KTTV	KCOP		0.25	5.00	5.00%	10%	200
230	WTBS	KSMQ	KTTC	WGN	KITN					0.25	3.50	7.14%	15%	210
211	WTBS	KTTV	KCET							0.25	2.25	11.11%	25%	225
347	WTBS	WWOR	WFMZ	WMA						0.25	3.25	7.69%	20%	260
43	WTBS	KCAL	KTLA	KTTV	KAET	KPNX	KTSP			0.25	4.75	5.26%	15%	285
13	KCBS	KNBC	KTLA	KABC	KCET	KCAL	KTTV	KWHY	KCOP	0.25	6.00	4.17%	16%	384
83	WTMJ	WITI	WTV	WGN	WISN	WGMA	WPNE			0.25	4.00	6.25%	25%	400
210	WTBS	WGN	WUFT							0.25	2.25	11.11%	45%	405
235	WTBS	KHTV	KRIV	KTXH	KUHT	KTRE	WGN	KHOU	KTRK	0.25	6.00	4.17%	20%	480

COMPARISON 1992 BORTZ SURVEY PBS RESPONSES WITH 1992 ROYALTY PAYMENTS FOR PBS

NO.	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	CALL SIGN	PBS DSEs	TOTAL DSEs	% PBS DSEs	PBS VALUE	INDEX
1475	WTBS	WVIA									0.25	1.25	20.00%	5%	25
1392	WTBS	WGN	WTIU	WXIN	WISH	WRTV	WTHR	WFYI			0.50	4.00	12.50%	5%	40
1406	WTBS	WSBK	WNET								0.25	2.25	11.11%	5%	45
1139	WTBS	WWOR	WJCT								0.25	2.25	11.11%	5%	45
744	WTBS	WGN	WTTW								0.25	2.25	11.11%	5%	45
578	WTBS	WGN	WWOR	KBYU							0.25	3.25	7.69%	5%	65
205	WTBS	WGN	WMVS	WTMJ	WVTV						0.25	3.50	7.14%	5%	70
305	WTBS	WGN	WKBD	WFRV	WLEF						0.25	3.50	7.14%	5%	70
1858	WTBS	KSPS									0.25	1.25	20.00%	15%	75
2100	WTBS	WGN	KLRN								0.25	2.25	11.11%	10%	90
1342	WTBS	WGN	WWOR	WTTW	WHA	WFLD					0.50	4.50	11.11%	10%	90
1399	WTBS	WGN	KOED	KARK							0.25	2.50	10.00%	10%	100
500	WTBS	WGTE	WBGU	CBET							0.50	2.50	20.00%	20%	100
965	WTBS	KOED	WIBW	KSNF	KMBC	KSHB					0.25	1.75	14.29%	15%	105
1698	WTBS	WGN	KITN	KSMQ							0.25	3.25	7.69%	10%	130
1678	WTBS	KDFW	KLTV	WFAA	KXAS	KTVT	KERA				0.25	3.25	7.69%	10%	130
1462	WTBS	WGN	WWOR	WHA							0.25	3.25	7.69%	10%	130
2155	WTBS	WFLD	WTTW								0.25	2.25	11.11%	15%	135
1465	WTBS	WGN	KCET	KTLA	KCOP	KCBS	KCAL	KABC	KTTV	KNBC	0.25	7.00	3.57%	5%	140
716	WTBS	WWOR	WABC	WNET							0.25	2.50	10.00%	15%	150
465	WTBS	WSBK	WGBH	CKSH	CHLT						0.25	4.25	5.88%	10%	170
2113	WTBS	KUHT	KTXH								0.25	2.25	11.11%	20%	180
2240	WTBS	WPIX	WSBK	WGBX	WLVI	WHDH	WFXT				0.25	4.50	5.56%	10%	180
1293	WTBS	WGN	WWOR	WCBS	WABC	WPIX	WSKG	WNET			0.50	5.00	10.00%	20%	200
1364	WTBS	WGN	WWOR	WNED	WNYW	WPIX					0.25	5.25	4.76%	10%	210
1448	WTBS	WFSB	WTIC	WVIT	WNJU	WVIA					0.25	3.75	6.67%	15%	225
1319	WTBS	WGN	WWOR	WEDU	WUFT	WACX					0.50	4.50	11.11%	30%	270
1426	WTBS	WLIW									0.25	1.25	20.00%	60%	300
1434	WTBS	WGN	KITN	KSMQ							0.25	3.25	7.69%	25%	325
365	WTBS	WWOR	WNYW	WROC	WPIX	WXXI					0.25	4.50	5.56%	20%	360
1413	WTBS	WNET	WGBS	WTFX	WPHL	WNJU					0.25	5.25	4.76%	20%	420

"DISTANT SIGNAL CARRIAGE" OF TV STATIONS BROADCASTING
MAJOR LEAGUE BASEBALL GAMES DURING 1992, PER JS EX.D
(SOURCE OF DATA RE ROYALTIES REMITTED BY FORM 3 CABLE
SYSTEMS DURING 1992-1:CABLE DATA CORP.- AUGUST 3,1994)

<u>TEAM</u>	<u>TOTAL STATIONS</u>	<u>STATIONS GENERATING LESS THAN \$1,000</u>
ATLANTA BRAVES	1	0
CHICAGO CUBS	11	6
CINCINNATTI REDS	21	10
HOUSTON ASTROS	14	11
LOS ANGELES DODGERS	2	1
NEW YORK METS	2	0
PHILADELPHIA PHILLIES	3	0
PITTSBURGH PIRATES	8	2
ST. LOUIS CARDINALS	29	19
SAN DIEGO PADRES	13	10
SAN FRANCISCO GIANTS	5	2
BALTIMORE ORIOLES	9	6
BOSTON RED SOX	7	2
CALIFORNIA ANGELS	1	0
CHICAGO WHITE SOX	1	0
CLEVELAND INDIANS	1	0
DETROIT TIGERS	7	3
KANSAS CITY ROYALS	19	10
MILWAUKEE BREWERS	6	3
MINNESOTA TWINS	12	7
NEW YORK YANKEES	5	1
OAKLAND ATHLETICS	10	6
SEATTLE MARINERS	7	4
TEXAS RANGERS	<u>17</u>	<u>13</u>
	211	116

CABLE NETWORKS TRANSMITTING MAJOR LEAGUE BASEBALL GAMES
AND/OR OTHER PROFESSIONAL SPORTS DURING 1992

(Source) "Regional Sports Networks -Media Guide - March 1992"
National Cable Television Association

ALABAMA

Sportsouth Network
Group W Sports

ALASKA

Prime Sports Northwest

ARIZONA

Prime Ticket Network
SportsChannel Los Angeles
Group W Sports

San Diego Padres
Sun Cable - Yuma,AZ

ARKANSAS

Home Sports Entertainment
Prime Network

St. Louis Cardinals
TCI Cable-Jonesboro,AR
Blytheville,AR
Paragould,AR
Corning,AR
Pocahontas,AR

CALIFORNIA

Group W Sports
Prime Ticket Network
SportsChannel Pacific
SportsChannel Los Angeles

San Diego Padres
Century - El Centro,CA
King Cable - Lake Elsinore,CA
Tele-Cable - Borrego Springs,CA
Warner Cable - Palm Springs,CA

COLORADO

Prime Sports Network-Rocky Mountain
Group W Sports

CONNECTICUT

Group W Sports
Madison Square Garden Network
SportsChannel New England
SportsChannel New York

DELAWARE

Home Team Sports
PRISM

DISTRICT OF COLUMBIA

Group W Sports
Home Team Sports

FLORIDA

Sunshine Network
SportsChannel Florida
Group W Sports

GEORGIA

Group W Sports
Sportsouth Network

HAWAII

Prime Ticket Network
SportsChannel Los Angeles

IDAHO

Prime Sports Network-Intermountain West
Prime Sports Northwest

ILLINOIS

Prime Sports Network-Midwest
SportsChannel Chicago

St. Louis Cardinals
Telecable-Normal/Bloomington, IL

INDIANA

Group W Sports
Prime Sports Network-Midwest
SportsChannel Chicago
SportsChannel Cincinnati

IOWA

Prime Sports Network-Upper Midwest
SportsChannel Chicago

St. Louis Cardinals
Heritage-Des Moines, IA

KANSAS

Prime Sports Network-Rocky Mountain

KENTUCKY

Prime Sports Network-Midwest
SportsChannel Cincinnati
SportsChannel-Ohio

St. Louis Cardinals
Mayfield, KY
Murray Cable Murray, KY

LOUISIANA

Home Sports Entertainment

MAINE

SportsChannel New England
New England Sports Network

MARYLAND

Group W Sports
Home Team Sports
KBL Sports Network

MASSACHUSETTS

SportsChannel New England
Group W Sports
New England Sports Network

MICHIGAN

Pro Am Sports System (PASS)

MINNESOTA

Group W Sports

Prime Sports Network-Upper Midwest

MISSISSIPPI

Sportsouth Network

MISSOURI

Group W Sports

Prime Sports Network-Midwest

St. Louis Cardinals
TCI Cable-Columbia,MO
TCI Cable-Jefferson City,MO
Kennett,MO
Telecable-Springfield,MO
Telecable-Normal/Bloomington,IL

MONTANA

Prime Sports Network-Rocky Mountain

Prime Sports Network-Intermountain West

Prime Sports Northwest

NEBRASKA

Prime Sports Network-Rocky Mountain

NEVADA

SportsChannel Los Angeles

SportsChannel Pacific

Prime Sports Network-Intermountain West

Prime Ticket Network

NEW HAMPSHIRE

Sports Channel New England

New England Sports Network

NEW JERSEY

SportsChannel New York

SportsChannel Philadelphia

Madison Square Garden Network

PRISM

NEW MEXICO

Prime Sports Network-Rocky Mountain

NEW YORK

Sports Channel New England

SportsChannel New York

Group W Sports

KBL Sports Network

Madison Square Garden Network

Empire Sports Network

NORTH CAROLINA

Group W Sports
Home Team Sports
Sportsouth Network

NORTH DAKOTA

Prime Sports Network-Upper Midwest

OHIO

KBL Sports Network
Prime Sports Network-Midwest
Pro Am Sports System (PASS)

OKLAHOMA

Home Sports Entertainment

St. Louis Cardinals
TCI Cable-Tulsa,OK
Cox Cable Oklahoma City,OK
Multimedia-Edmond, OK
Multimedia -Stillwater,OK

OREGON

Group W Sports
Prime Sports Northwest

PENNSYLVANIA

SportsChannel Philadelphia
Group W Sports
Home Team Sports
KBL Sports Network
Madison Square Garden Network
PRISM

RHODE ISLAND

SportsChannel New England
Group W Sports
New England Sports Network

SOUTH CAROLINA

Sportsouth Network

SOUTH DAKOTA

Prime Sports Network-Upper Midwest

TENNESSEE

Group W Sports
Sportsouth Network

St. Louis Cardinals
Memphis,TN
Totalreach-Jackson,TN

TEXAS

Group W Sports
Home Sports Entertainment

Houston Astros
TCA Cable,Bryan

UTAH

Group W Sports
Prime Sports Network-Intermountain West

VERMONT

SportsChannel New England
New England Sports Network

VIRGINIA

Group W Sports
Home Team Sports

WASHINGTON

Group W Sports
Prime Ticket Network

WEST VIRGINIA

Home Team Sports
KBL Sports Network

WISCONSIN

Prime Sports Network-Upper Midwest
Prime Sports Network-Midwest

WYOMING

Prime Sports Network-Rocky Mountain
Prime Sports Network-Intermountain West

1992/1 DATA

SYSTEMS

CARRYING

SUBS

STATION

TO LOCAL

CLUB

STATION

AS LOCAL

SYSTEMS

ATLANTA BRAVES	WTBS	36	645,793
CHICAGO CUBS	WGN	67	1,500,333
	KLJB	8	121,395
	WCEE	9	46,684
	WEEK	10	149,297
	WICD	5	58,210
	WICS	14	156,373
	WQRF	11	146,703
	KCRG	10	131,855
	WHO	13	140,740
	WFFT	16	170,182
	WMCC	16	294,708
CINCINNATI REDS	WLWT	18	369,360
	WHIO	22	460,639
	WHIZ	5	67,226
	WLIO	9	77,028
	WTTE	18	355,639
	WAQ (W19AQ)	5	221,739
	WAYK (WAYQ)	1	6,694
	WBR (W07BR)	N/A	
	WJTC	8	158,540
	WTMV	11	250,521
	WEVV	9	100,761
	WFFT	16	170,182
	WMCC	16	294,708
	WDKY	10	118,238
	WDRB	16	282,960
	WGRB	4	25,102
	W43AG	1	5,408
	WHKY	4	61,186
	WEMT	12	127,998
	WXMT (WXMI)	16	278,919
	WVAH	22	241,008

1992/1 DATA

SYSTEMS

CARRYING

SUBS

STATION

TO LOCAL

CLUB

STATION

AS LOCAL

SYSTEMS

HOUSTON ASTROS	KTXH	21	522,824
	KETX	N/A	
	KIDY	2	49,686
	KJLF	N/A	
	KJTL	5	68,257
	KVC-13 (K13VC)	N/A	
	KXTX	27	513,211
	K16BV	N/A	
	K40AN	1	37,135
	WAYK	N/A	
	WJTC	8	158,540
	K62 (K62DW)	N/A	
	WBTR	N/A	
LA DODGERS	KHFT	1	9,890
	KTTV	83	2,335,414
	KRLR	1	134,458
NY METS	WWOR	99	4,362,663
	WTXX	31	1,154,572
PHILADELPHIA PHILLIES	WTFX	66	1,974,577
	WLYH	20	412,745
	WOLF	17	220,766
PITTSBURGH PIRATES	KDKA	54	920,152
	WETG	6	85,614
	WPMT	19	422,773
	WWCP	18	239,027
	WKBN	18	470,386
	WTOV	19	207,885
	WVAH	22	241,008
	WYVN	4	93,767

1992/1 DATA

SYSTEMS

CARRYING

SUBS

STATION

TO LOCAL

CLUB

STATION

AS LOCAL

SYSTEMS

ST. LOUIS CARDINALS	KPLR	27	428,029
	KDEB	4	58,917
	KOMU	6	54,693
	KQTV	4	35,943
	K57OR/KSNF	7	31,355
	KASN	8	132,919
	KFBI	N/A	
	WAYK	N/A	
	WAYQ	1	6,694
	WJTC	8	158,540
	WTMV	11	250,521
	W07BR	N/A	
	W19AQ	5	221,739
	KJMH	3	19,517
	KOCR	2	61,968
	KOIA	N/A	
	KTIV	8	41,741
	K45CW	N/A	
	K51CR	N/A	
	WCCU	3	46,747
	WGEM	6	44,397
	WRSP	6	95,432
	WYZZ	8	129,552
	WEVV/W52AZ	9	100,761
	KBSI	16	110,839
	WPTY	13	259,491
	KXIV	7	156,341
SAN DIEGO PADRES	KUSI	6	601,733
	KESQ	6	100,510
	XHBJ	N/A	
	KMOH	1	5,738
	KUSK	3	47,698
	K23BJ	N/A	
	WJTC	8	158,540
	WTTA	N/A	
	KFVE	2	231,804
	KZIA	2	104,906
	KRLR	1	134,458
	KCCZ	1	6,594
	KOOG	2	44,504

1992/1 DATA

	# SYSTEMS		
	CARRYING	# SUBS	
	STATION	TO LOCAL	
CLUB	AS LOCAL	SYSTEMS	

SAN FRANCISCO GIANTS	KTVU	64	1,577,534
	KCBA	4	99,508
	KMPH	11	269,748
	KRBK	27	604,277
	KAME	7	95,352
BALTIMORE ORIOLES	WMAR	34	1,068,013
	WDCA	29	1,300,284
	WAYK	N/A	
	W07BR	N/A	
	WAI (W14AU)	1	5,792
	WVT (W20AT)	N/A	
	WYED	2	20,697
	W10BZ	N/A	
BOSTON RED SOX	WYVN	4	93,767
	WSBK	78	1,692,499
	WGGB	16	347,251
	WLNE	39	878,298
	WVIT	27	1,066,546
	WCSH	21	284,192
	WLBZ	5	41,830
CALIFORNIA ANGELS	WNNE	9	82,675
	KTLA	88	2,654,014
CHICAGO WHITE SOX	WGN	67	1,500,333
CLEVELAND INDIANS	WUAB	31	732,911
DETROIT TIGERS	WDIV	38	8,992,531
	WJRT	15	291,276
	WLNS	12	169,580
	WLUC	5	46,042
	WPBN	7	43,870
	WTOM	1	8,370
	WWMT	21	358,135

1992/1 DATA

SYSTEMS

CARRYING

SUBS

STATION

TO LOCAL

CLUB

STATION

AS LOCAL

SYSTEMS

KANSAS CITY ROYALS	WDAF	18	445,004
	KDEB	4	58,917
	KRCG	6	43,415
	KSNF	7	31,355
	K57DR	N/A	
	KPBI	N/A	
	KWHD	N/A	
	KJMH	3	19,517
	KOCR	2	61,968
	KTIV	8	41,751
	KYOU	4	21,360
	WOI	11	129,036
	KAKE	12	173,081
	KLBY	N/A	
	KUPK	3	19,188
	WIBW	7	97,417
	KHAS	3	24,486
	WOWT	6	206,213
	KJRH	10	210,719
MILWAUKEE BREWERS	KCGV	21	323,120
	WACW	6	50,204
	WCOW (WQOW)	2	18,474
	WGBA	12	144,809
	WLAX	8	59,904
	WMSN	12	138,002
MINNESOTA TWINS	WCCO	26	502,181
	KCCO	6	38,272
	KCCW	3	13,914
	KDLH	7	52,287
	KITN	21	475,579
	WAR 16 (W16AR)	N/A	
	WBR7 (W07BR)	N/A	
	KIMT	5	62,199
	KTHI	8	61,646
	KEVN/KIVV	1	16,445
	KSFY	7	48,628

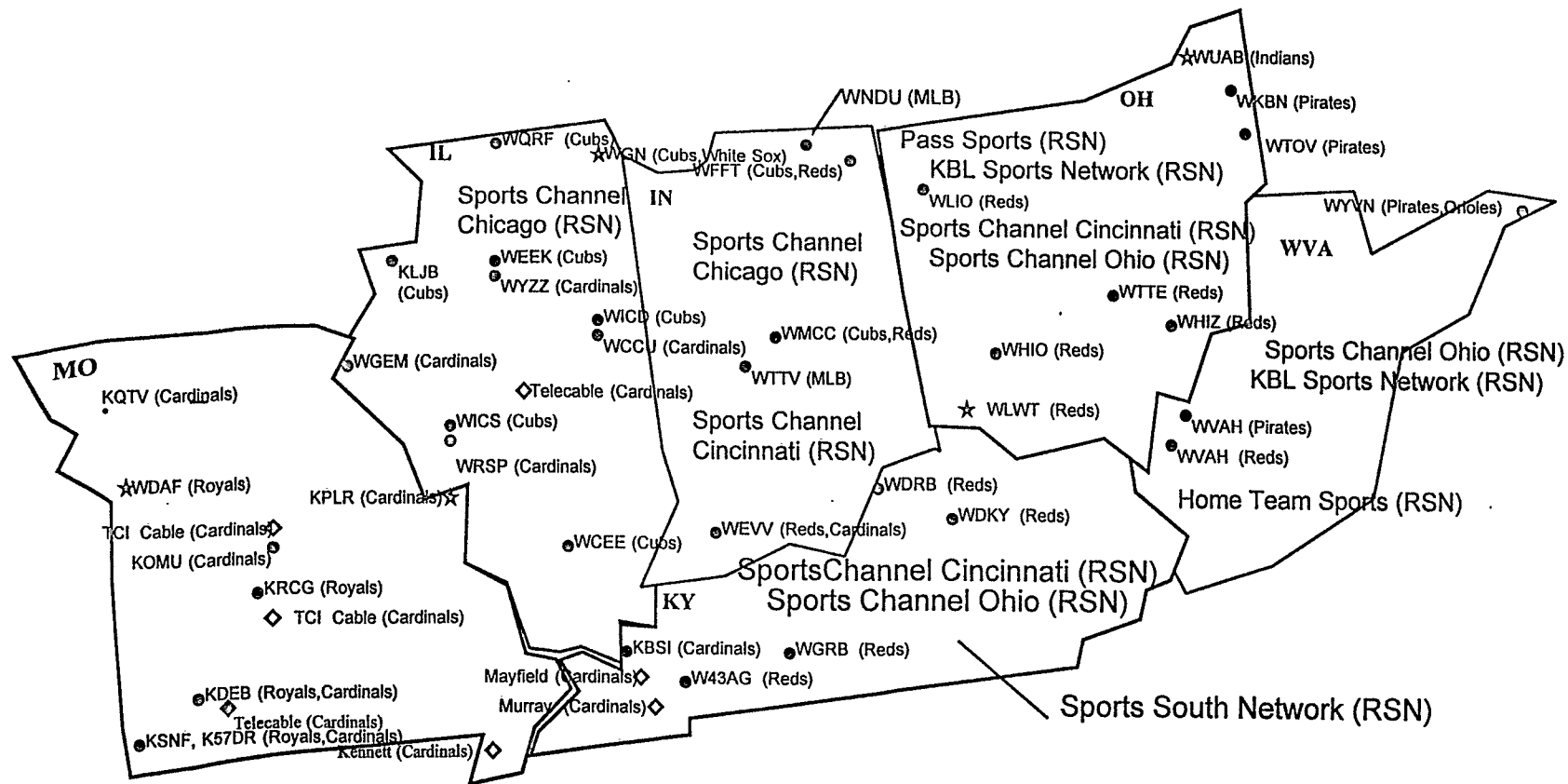
1992/1 DATA
SYSTEMS

CARRYING # SUBS
STATION TO LOCAL
AS LOCAL SYSTEMS

CLUB	STATION	AS LOCAL	SYSTEMS
NEW YORK YANKEES	WPIX	99	3,669,946
	WHEC	8	252,890
	WTWS	11	223,751
	WBFS	N/A	
	WNPL	3	101,618
OAKLAND ATHLETICS	KPIX	55	1,450,080
	KAIL	3	135,909
	KCBA	4	99,508
	KCRA	37	766,451
	KICU	48	1,383,438
	KMOH	1	5,738
	KUSK	3	47,698
	KAME	7	95,352
	KRLR	1	134,458
	KOOG	2	44,504
SEATTLE MARINERS	KSTW	23	645,378
	KIRO	29	759,372
	KTBY	1	40,472
	KFVE	2	231,804
	KEBN	N/A	
	KLSR	2	8,388
	KXIV	7	156,341
TEXAS RANGERS	KTVT	41	697,282
	KBO (K35BO)	N/A	
	KCIT	4	51,643
	KDF	N/A	
	KJTL	5	68,257
	KJTV	6	58,287
	KVC (K13VC)	N/A	
	KPBI	N/A	
	WAYK (WAYQ)	1	6,694
	WBR (W07BR)	N/A	
	WJTC	8	158,540
	KDW (K62DW)	N/A	
	WBTR	N/A	
	KDS (K53DS)	N/A	
	KOCB	7	126,006
	KTFO	1	150,511
	KOOG	2	44,504

Major League Baseball

Cable & Broadcast Coverage

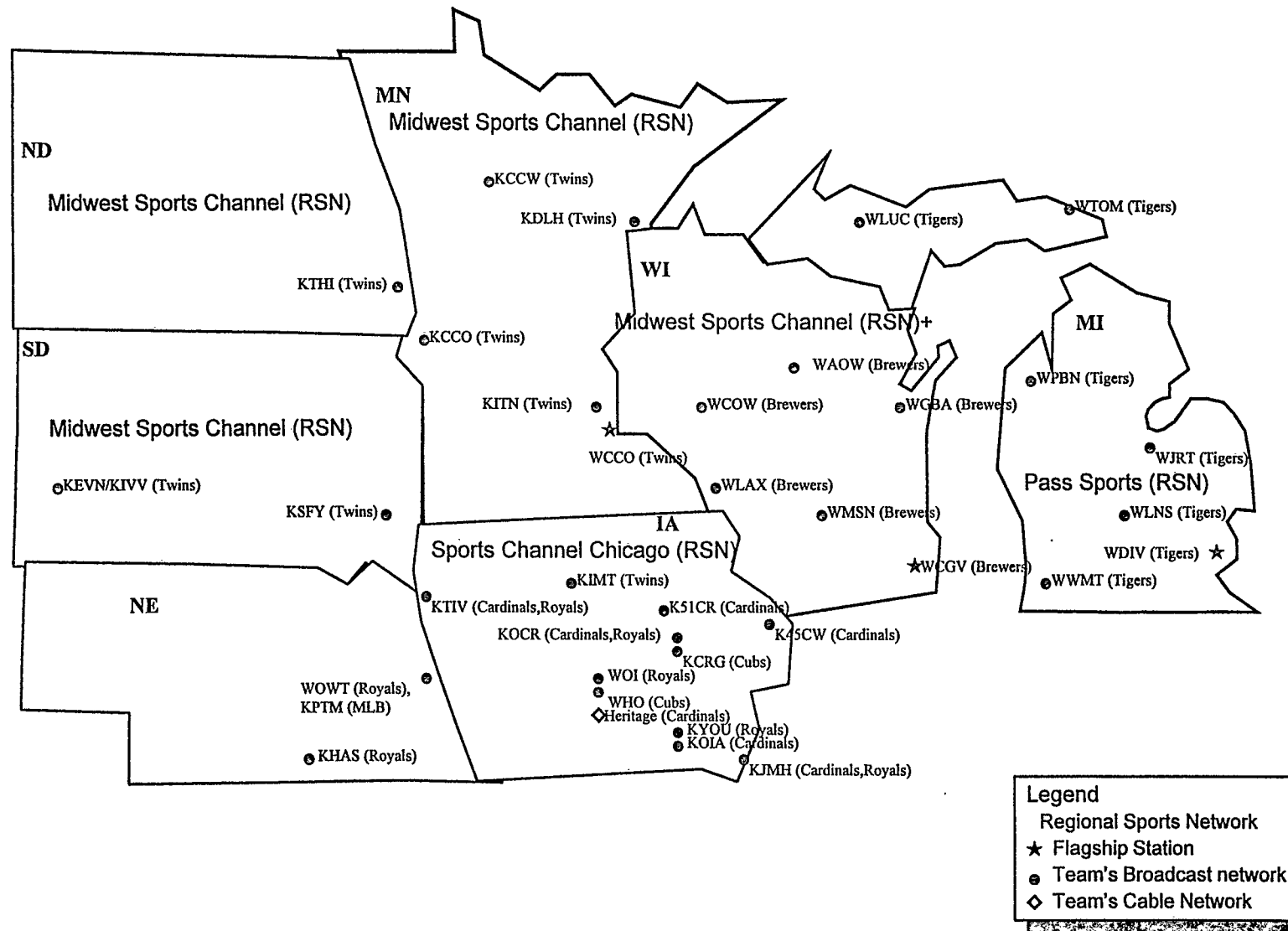


Legend

- Regional Sports Network
- ★ Flagship Station
- Team's Broadcast network
- ◆ Team's Cable Network

Major League Baseball

Cable & Broadcast Coverage



TELEVISION BROADCAST DISTRIBUTION OF NATIONAL
BASKETBALL ASSOCIATION GAMES DURING 1990-1991

During 1990-1991, 1,107 regular season NBA games were played. The "1990-91 NBA Broadcast Manual" includes a "1990-91 Master TV Schedule", dated 9/17/90, which indicates for each game the day and date it was scheduled to be played; the start time; the teams; and details regarding television coverage. This information is provided both for the visiting and the home team. For each game, the call-sign of one or more TV stations and/or sports cable network is provided for games other those to be transmitted nationally by NBC or TNT (Turner Network Television -a basic cable channel.)

These data have been analyzed to determine how many of the 1,107 were not scheduled to be transmitted by a regional sports network or a national network.

Of the 1,107, we found that 100 (9.0%) were not scheduled to be televised - locally, regionally or nationally. We also found that of the remaining 1,007, 218 were not scheduled to be distributed via a local, regional, or national network.

Thus of the 1,107 NBA games, only 318 were not available to viewers outside the city in which the game was played. Only 318 were not transmitted via a regional or national sports network.

This means that the owners of NAB teams had authorized national and/or regional cable networks to distribute 789 games - 72.2% of the total. Thus television coverage of nearly 3 out of every 4 NBA basketball games were available to viewers via cable networks.

Cable system operators are not required to remit royalties for diffusion of cable networks. Regardless of the distance between a cable system and the site of games distributed by cable networks, the cable networks are not "distant signals."

Thus most television viewing of professional basketball is beyond the purview of Section 111 of the Copyright Act.

**218 Regular Season NBA Games, 1990 - 1991, Which Were Not Scheduled To Be Carried
By Any Regional Sports Network¹**

5	239	443	604	822	1040
8	248	445	609	824	1041
11	258	450	618	827	1043
12	259	468	649	829	1059
17	260	470	659	835	1063
19	265	471	660	839	1068
23	271	476	663	848	1071
24	281	478	674	849	1074
25	282	482	679	863	1080
39	283	483	683	865	1084
42	285	485	685	867	1087
45	288	494	688	870	1090
62	289	495	690	873	1091
65	295	501	692	891	1092
69	300	503	693	894	1095
75	304	506	703	902	
76	310	507	705	909	
81	313	509	711	920	
99	314	513	712	921	
107	327	523	714	932	
113	331	531	715	933	
123	337	540	720	936	
134	349	542	721	947	
140	350	544	740	956	
144	352	548	742	961	
147	353	551	746	966	
151	359	552	747	968	
158	361	553	748	971	
166	362	555	754	976	
174	367	556	757	978	
178	368	563	762	982	
180	370	564	764	983	
183	374	577	779	984	
184	380	584	781	989	
196	384	586	793	998	
201	389	588	801	1008	
207	402	589	802	1013	
221	409	595	806	1016	
237	412	596	809	1028	
238	429	600	819	1029	

¹ Source: NBA 1990-1991 Master TV Schedule.

**100 Regular Season NBA Games, 1990 - 1991, Which Were Not Scheduled To Be
Broadcasted By Any Regional Sports Network Or Any Individual Television Station¹**

30	387	887
35	393	906
58	401	824
63	405	928
71	410	949
91	421	950
114	427	953
116	441	977
127	442	999
130	486	1002
132	499	1004
149	508	1006
159	515	1011
168	517	1012
176	578	1017
182	581	1020
186	599	1033
191	603	1049
200	610	1052
204	621	1055
224	630	1057
229	643	
256	655	
257	666	
268	669	
290	689	
291	695	
293	698	
303	736	
305	741	
340	760	
356	767	
358	769	
363	772	
371	813	
375	814	
377	836	
378	843	
382	851	

¹ Source: NBA 1990-1991 Master TV Schedule.

TESTIMONY OF MARTIN FRANKEL

My name is Martin R. Frankel. I hold the position of Professor of Statistics and Computer Information Systems and Deputy Chair at Bernard Baruch College, City University of New York. I have been at Baruch College since 1971. I am also Senior Statistical Scientist at NORC, University of Chicago. I have been affiliated with NORC since 1974.

I received a BA (Mathematics) from the University of North Carolina in 1965. I received an MS (Mathematical Statistics) in 1967 and Ph.D. (Mathematical Sociology) in 1971 from the University of Michigan.

I am the author or co-author of 3 books, 3 book chapters and more than 40 articles and papers on various applications of statistics and computers.

I have been involved in the design, execution, analysis and evaluation of sample surveys since 1965. I have served as a consultant to more than 50 business and industry organizations since 1971.

I have given testimony concerning the use of statistics, including sample surveys, before the Interstate Commerce Commission, the Nuclear Regulatory Commission and in various Federal Courts.

I have served as Chair of the American Statistical Association Section on Survey Research. I have also served as Chair of the Standards Committee for the American Association for Public Opinion Research. At present, I am Chair of the Quality and Methods Council of the Advertising Research Foundation and I am President of the Market Research Council.

I am a Fellow of the American Statistical Society. My biography appears in Who's Who in America and American Men and Women of Science.

Two basic types of surveys have been presented to this panel in conjunction with the distribution of royalties. The MPAA has offered a survey by the Nielsen Company that provides information about the viewership of programming types on distant stations for which royalties have been collected. The Sports Claimants have presented surveys by the Bortz Company that focus on the "value" of program types to cable system operators.

These two types of surveys are fundamentally different with respect to the numerical quantities that they attempt to measure and estimate. In statistical jargon, the two types of surveys differ with respect to the "PARAMETERS" that are being estimated.

The PARAMETERS that are estimated by the Nielsen survey are related to the number of individuals who view different types of programs that are carried as "distant signals" by the various cable systems that contribute to the royalty pool. From an operational standpoint, the Nielsen survey attempts to estimate the viewing behavior of cable system subscribers in terms of the number of minutes spent viewing various types of programming.

The PARAMETERS that are the subject of estimation by the Bortz survey involve the concept of "value" of program types to cable system operators. In contrast with the Nielsen study, the population group that is the subject of study for this parameter in the Bortz survey is not cable system subscribers. Rather, the population is the cable system operators, and in particular, the programming decision makers for these systems.

From an operational standpoint, the quantities that are the subject of estimation in the Bortz surveys are the values of various program types in response to a question about "what percentage, if any, of a fixed dollar amount would you spend on each type of programming"?

One of the important issues that will be faced by this panel concerns the degree to which viewing behavior (as measured among viewers in the Nielsen survey) and/or "value" (as measured among cable system operators in the Bortz survey) will be used in royalty allocations.

In the process of deciding the degree to which it should rely on measures of viewing behavior and "value," I recommend that the panel give explicit consideration to the issues of the overall ACCURACY to which viewing behavior and "value" are measured in the respective Nielsen and Bortz surveys.

When a measuring device is deemed to be accurate, then the user of the device can be assured that the device measures what it is supposed to measure,

In order to be ACCURATE, a measurement procedure must be both RELIABLE and VALID.

A measurement procedure is reliable if repeated use of the measurement procedure produces the same results under the same circumstances. This notion is illustrated by the following example.

Suppose that two different electronic devices (device A and device B) are used to measure the outside temperature at a certain location. Each of the two devices is used to make three measurements over a short period of time. All measurements are taken at the

same location. For purposes of this example, let us assume that the "TRUE" outside temperature does not change during the period of time it takes to make the 3 separate measurements on each of the two devices.

If the three reported temperature readings by device A are 30.0, 50.0 and 40.0 degrees F respectively, device A would be considered UNRELIABLE for most purposes.

If, on the other hand, device B produced temperature readings of 39.9, 40.1, and 40.0; this device would be considered RELIABLE for most purposes.

Now, if the TRUE outside temperature at the time of measurement was 40 degrees F, then device B would be said to provide a VALID measurement of temperature as well as a RELIABLE measurement of temperature. These two properties (RELIABLE measurement and VALID measurement) together indicate that device B provides an ACCURATE measurement of temperature for most purposes.

Device A, would not be considered ACCURATE, because it does not provide reliable measurement.

Of course, if the true outside temperature is actually 50 degrees F, at the time of measurement, then neither device A nor device B can be classed as ACCURATE, even though device B produces measurements that show a high degree of RELIABILITY.

Given the large amounts of money that are exchanged on the basis of ratings information, the Nielsen surveys have been extensively examined by industry groups in terms of both validity, reliability and accuracy of the viewing behavior reported.

In materials presented to the panel, Paul I. Bortz and James Trautman have used the terms reliability and consistency with respect to the Cable Operator Surveys. The material presented in the remainder of this document indicates that even though claims of consistency and reliability are made, the basic question used by the Bortz survey to measure value (Question 4B) does not provide a reliable measurement of what is claimed to be measured. Further analysis indicates that there appears to be inconsistency between the measurement of value, as obtained from the Bortz questionnaire, and a measure of actual dollar expenditure by the cable operators.

One method that may be used to examine the RELIABILITY of the constant sum allocation question appearing in the Bortz survey involves a comparison of responses from the same cable system operators from year to successive year. Given the nature of the Bortz survey design, there is generally little overlap from year to year among sample systems, except for the largest systems that are selected with certainty. However, in the survey years 1989 and 1990, which both used the same sample, there were a total of 140 cable systems that were included in both Bortz surveys. In succeeding years 1990 to

1991, 1991 to 1992 and 1992 to 1993, the number of cable systems in common to successive surveys were 33, 45 and 30 respectively. For these latter three successive year pairs, most of the overlap was restricted to only that portion of the population represented by the largest systems.

Because of the large number of systems (140) that were in both the 1989 survey (total size 198) and the 1990 survey (total size 179), the primary analysis focused on the 140 systems that provided data in both 1989 and 1990. As is discussed later, the basic findings for the 1989 and 1990 surveys are generally supported by analysis of the more limited base of systems that are common to pairs of surveys in the 1990-91, 1991-92 and 1992-3 pairs.

In the analysis that follows, we initially assume that for each cable system in the US, there exists a true "value" associated with each of the different program types measured in the Bortz survey. If this assumption is true, then it seems reasonable that at the individual cable system level, the individual program type values and the particular mixture of values among the different program types should not be subject to substantial year to year change. For a small fraction of systems, a new marketing direction might dictate substantial changes in this mixture of values. But, in general, if one accepts the underlying Bortz survey notion that programming decisions would be linked to both attracting and retaining subscribers and that this is linked to program types carried by the operators, there would appear to be a basic inconsistency with the notion that relative values of different program types might fluctuate widely from year to year.

In order to explore the reliability of the Bortz measurement of "value" of different program types, we will focus on the specific value levels that were assigned in successive years, by the same cable systems, on a SYSTEM by SYSTEM basis. If the Bortz "value" is a reliable measure, the value of programming types is unlikely to vary widely from one year to the next.

A useful graphic device for displaying information involving two measurements over the same set of elements (in this case the "value" assigned by cable system operators) is the "scattergram" or "scatter" diagram. Scatter diagrams make use of the horizontal axis (x-axis) and the vertical axis (y-axis) to display the two values associated with an element (a single point on the graph). We have used the x-axis to plot the response to the value question for a certain program type in the year 1989 and the y axis to plot the value assigned to the same program type by the same operator in the 1990 survey.

Graph 1, shows a hypothetical example in which the same cable systems give exactly the same answers to the a value question in 1989 and in 1990. For instance, the dot on the lowermost left position, represents the situation where the same system gave a value of 5 in 1989 and a value of 5 to the same program type in 1990. The dot at the upper most right portion of the graph displays the situation where a value of 95 was given in 1989 and

the same value of 95 was given in 1990. If all station operators are consistent in the values they give in succeeding the year, then all of the points will fall on a straight line (45 degree line) assuming the x and y axis scales are equal. To the extent that answers are different from year to year, the points on the graph will depart from falling on this 45 degree line.

Graph 2, shows the actual values that were assigned to Movies by the same 140 cable systems in the 1989 and 1990 Bortz surveys. For example, the right most dot on the graph represents one cable system that assigned movies a 100% share of value in 1989 and only a 50% share of value in 1990. The dot directly above the M in the word Movie89 (on the x axis), represents a cable system that assigned movies a 45% value in 1989 and a 0% in 1990. There are a series of dots directly above the 20 value on the x axis (Movie89). These dots indicate the various values that were assigned by systems that gave movies a value of 20 in 1989. The highest dot indicates that a system assigned movies a value of 20 in 1989, and then gave movies a value of 70 in 1990.¹

Statisticians have developed a number of quantitative measures that may be used to assess the degree of consistency between pairs of values, such as we have when we consider responses to various value categories in successive survey years. One of the most common measures is known as R-squared. Sometimes R-squared is known as the Coefficient of Determination. An important property of the R-squared is that it tells us the proportion of "variation" in the Y axis values that may be "explained" by the corresponding X axis values. In this situation, R-squared tells us the proportion of the variation in the 1990 values that are "explained" or "predicted" by the corresponding 1989 values.

In Graph 1, the value of R-squared is 1.0. That means that there is perfect consistency (a linear relationship) between the values reported in 1989 and those reported in 1990. Stated in a somewhat different way, if we know the 1989 value, we can predict the 1990 value without error.

In any real measurement situation it is unrealistic to expect values of R-squared to be 1.0. However, if measures are reliable then they should show high values for R-squared. What is a "high" R-squared value will depend upon the measurements taken. In this analysis, we compare the same measure ("value or programming types), asked of the same cable operators using the same question in successive years. In this type of

¹ The software used to produce these graphs does not provide a mechanism to indicate when there are multiple systems at the same point. A full listing of the data value pairs is provided in attachment A.

measurement situation R-squared values of .9 and above are desirable. Values above .75, but below .90 might be acceptable. Values below .75 indicate some substantial lack of reliability. Values below .5, indicate that on a repeated basis, that at least one half of the measurement, and possibly more, consists of "noise."

For the Movie values shown in Graph 2, the value of R-squared is 0.053.² This means that only 5.2% (out of a total of 100%) of the variation in the specific answers given by systems in 1990, is predicted by (or related to) the specific answers given by systems in 1989. This means that there is very little consistency between the values assigned to movies in 1989 and those assigned to movies in 1990 by the same operators.

Graphs 3-7 show the distribution of value answers associated with Sports, Syndicated Shows, News, PBS and Religious program types that were given by the cable systems that were in both the 1989 and 1990 surveys. For Sports the value of R-squared was 0.094 and for Syndicated Shows the value of R-squared is 0.034. R-squared values for News, PBS and Religious program types are. 0.014, 0.165, and 0.104 respectively. All of these values indicate that knowing the 1989 value assigned to the programming type would give relatively little help in predicting the value that is assigned in 1990.

The basic conclusions that may be drawn from this analysis, are that either the "value" assigned by operators to types of programming can truly vary widely from year to year, or that the question that is being used to measure the value of different program types does not have high reliability. In fact, the low R-squared values (from year to year) indicates that no matter what is being measured by this question, either the quantity itself is not stable from year to year, or its measurement is not stable from year to year.

It should be noted that in the examination of pairs of responses to the value question on the more limited sample pairs in years subsequent to 1989-90, some of the R-squared values approach levels that might be considered to indicate moderate reliability. However, this occurs only for certain year pairs and for certain program types.

² This value of 0.053, is in fact, a somewhat inflated estimate of the percent of variation in the 1990 values that is explained by the 1989 values. The "adjusted" R square is slightly less than 5%.

Furthermore, the set of stations for which these R-squared values could be computed were concentrated among the larger cable systems.³

In addition to examining the level of reliability of the measures used in the Bortz survey, it was possible to examine one aspect of the VALIDITY of these measures. Validity refers to whether the Bortz survey offers an appropriate measure of the "true" value. The Bortz valuation question asked cable operators to consider the percentage, if any, of a "fixed dollar amount [they would] spend in order to acquire all the programming actually broadcast" on distant signals. I asked the MPAA if it would be possible to determine the dollar amount spent by the cable systems for programming actually broadcast. The information used in this analysis of validity was provided by the MPAA in response to that question.

It was explained to me that in most instances when a cable system decides to carry a distant signal, the signal will generally carry a mixture of program types. A notable exception to this situation occurs in the case of PBS. When a cable system carries a station that is classified as PBS, all of the programming carried by the station is considered to be PBS. This fact enabled MPAA to determine what percentage of a cable operator's royalty fees could be assigned to the distant PBS stations.

For the years 1990, 1991 and 1992, a total of 19, 38 and 31 systems in the Bortz survey carried at least one PBS signal. For those systems that carried at least one PBS signal, it was possible to compare the value allocated to the PBS program type in the Bortz survey and the proportion of the royalty payment attributable to the actual carriage of the PBS station.

Graphs 8, 9 and 10 show the percentage share of royalty payment associated with the PBS signal (x axis) and the value assigned to PBS by cable system in the Bortz survey. (y axis) If one made use of the actual proportion of royalty payments associated with PBS to predict the value assigned to PBS, the R-squared values are 0.20 for 1990, 0.10 for 1991 and 0.15 for 1992. Thus, in the years examined, at most 20% of the variation in PBS values assigned by cable systems is "explained" or attributable to the actual share of royalty payments associated with PBS stations.

³ In the 1990-91 surveys for 33 operators the R-squared values were 0.449, 0.155, 0.306, 0.407, 0.615 and 0.133 for Movies, Sports, Syndicated, News, PBS and Religious program types respectively. In the 1991-92 surveys for 45 operators the values were 0.139, 0.282, 0.046, 0.179, 0.415, and 0.003. In the 1992-93 surveys for 30 operators the values were 0.146, 0.558, 0.017, 0.030, 0.303 and 0.209.

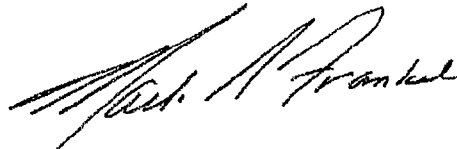
These graphs and R-square values show that there is not much agreement between the measure of PBS value as reported by Bortz survey respondents and the actual expenditure associated with PBS programming.

Thus, it does not appear that these respondents are equating actual cost with value or worth by different program types. This is surprising, since one would expect that if a certain program type is worth a certain amount in terms of attracting and/or retaining subscribers, the cable system would be allocating expenditures in a way that is consistent with this worth or value.

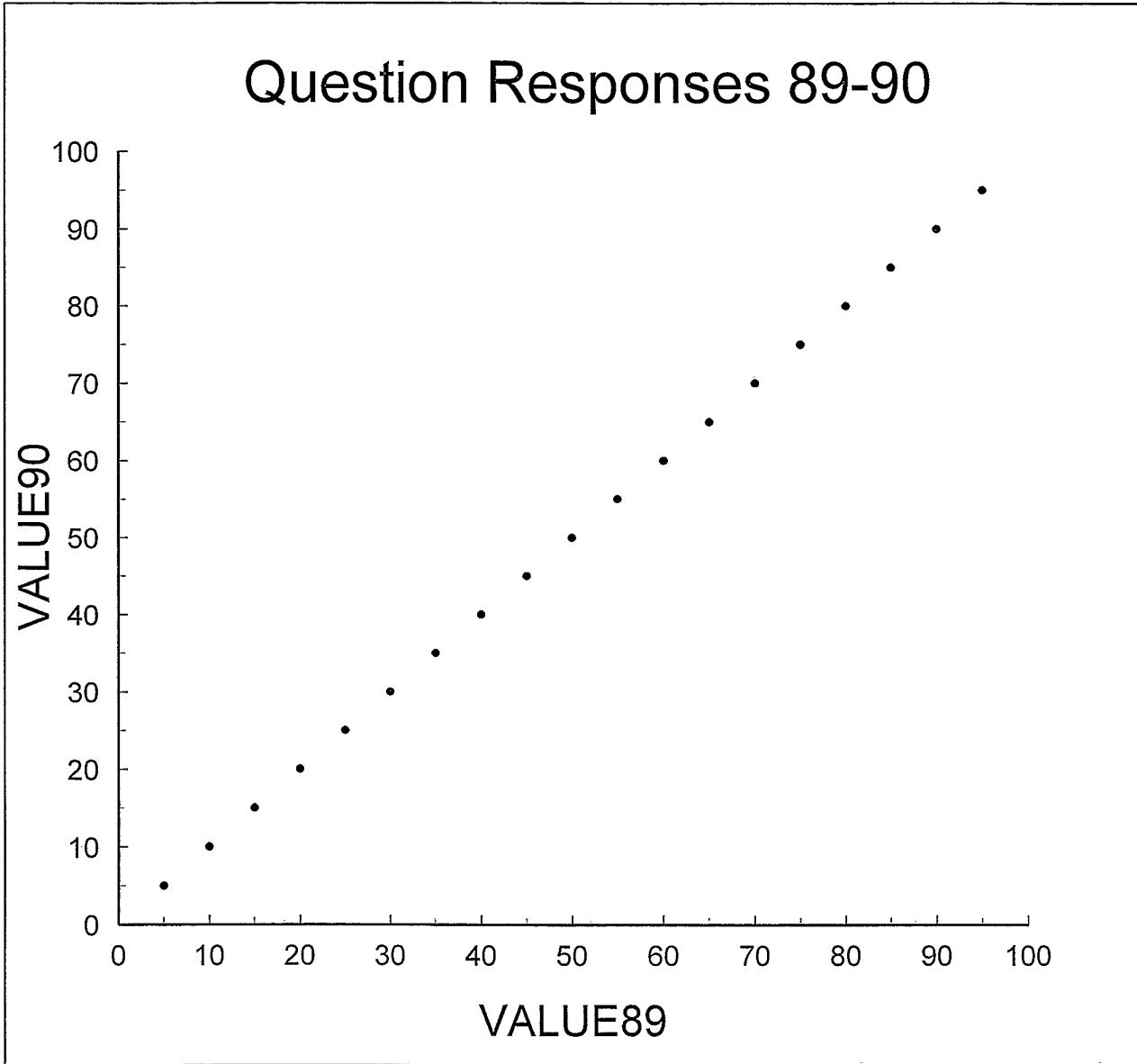
The lack of a high degree of relationship between actual royalty share attributed to PBS and the value assigned to PBS casts doubts on any claim that the responses to the Bortz value question is related to actual monetary behavior of the systems.

In summary, these analyses indicate that the basic conditions that are required for ACCURACY do not appear to be present in the Bortz surveys. This lack of accuracy is supported by the low reliability for the value question and the lack of validity, where it was possible to compare actual payments with dollar value assigned.

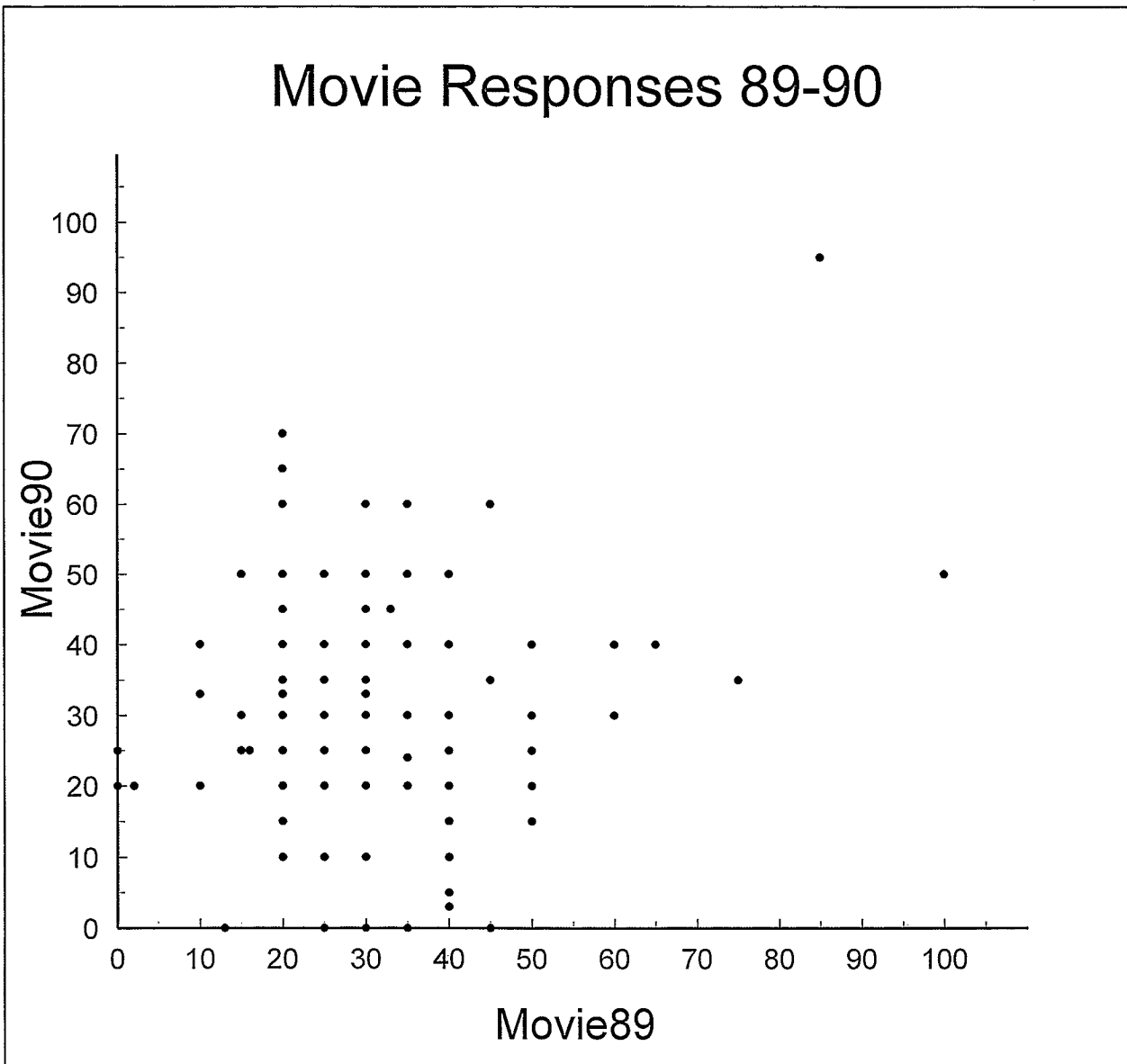
I declare under penalty of perjury that the foregoing testimony is true and correct and of my personal knowledge. Executed on February 14, 1996

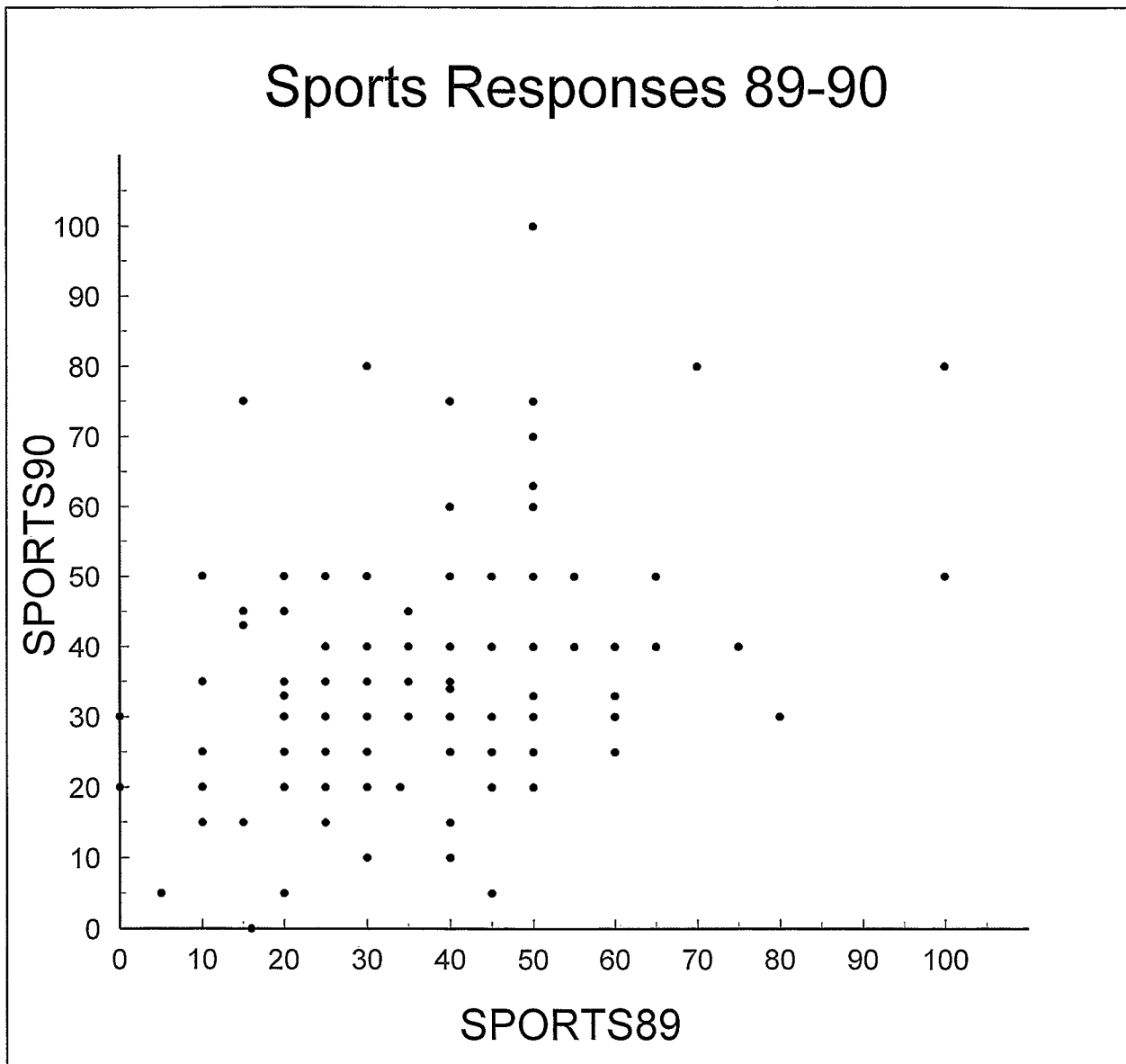
A handwritten signature in black ink, appearing to read "Martin R. Frankel", written in a cursive style.

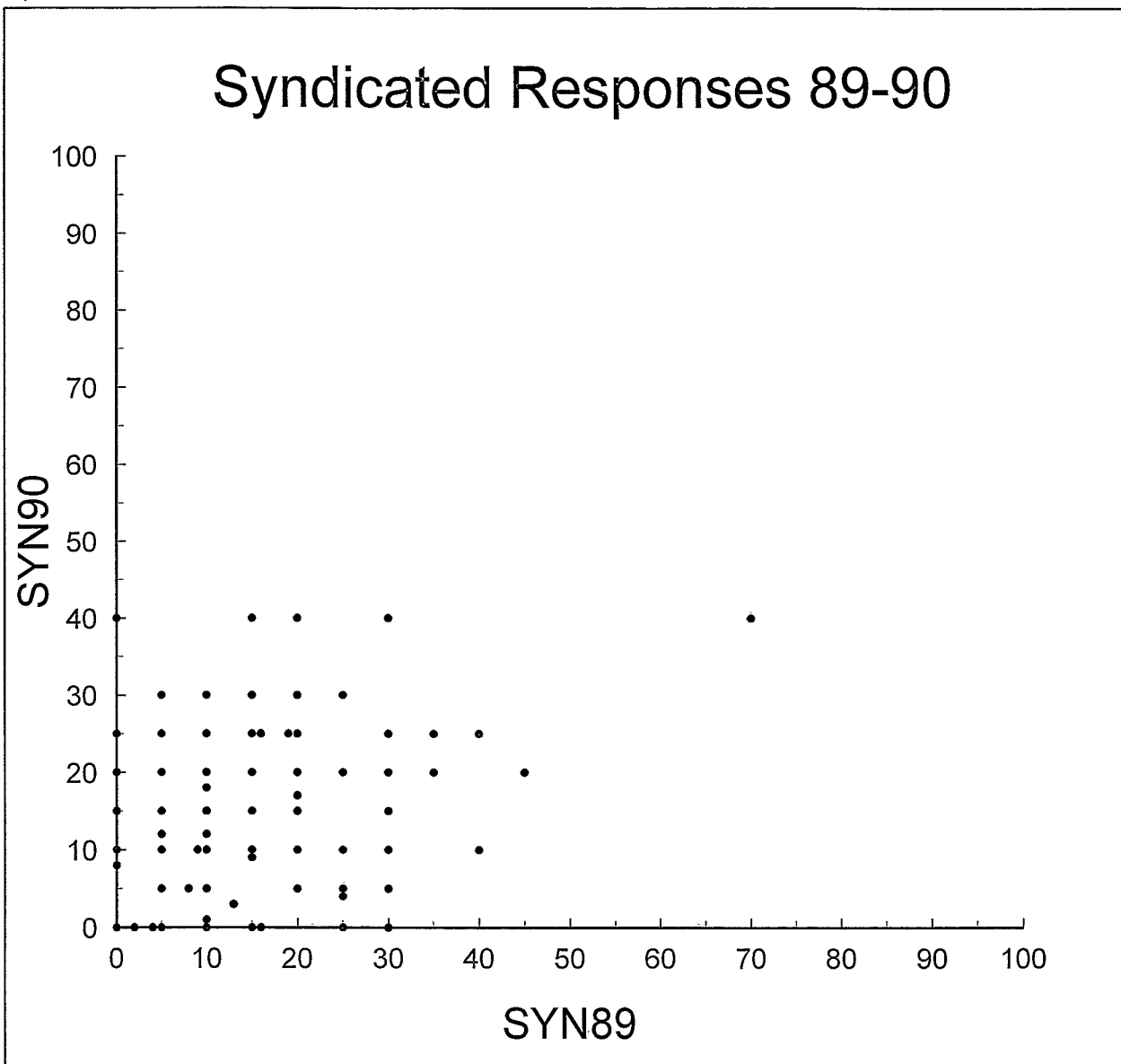
Martin R. Frankel, Ph.D.

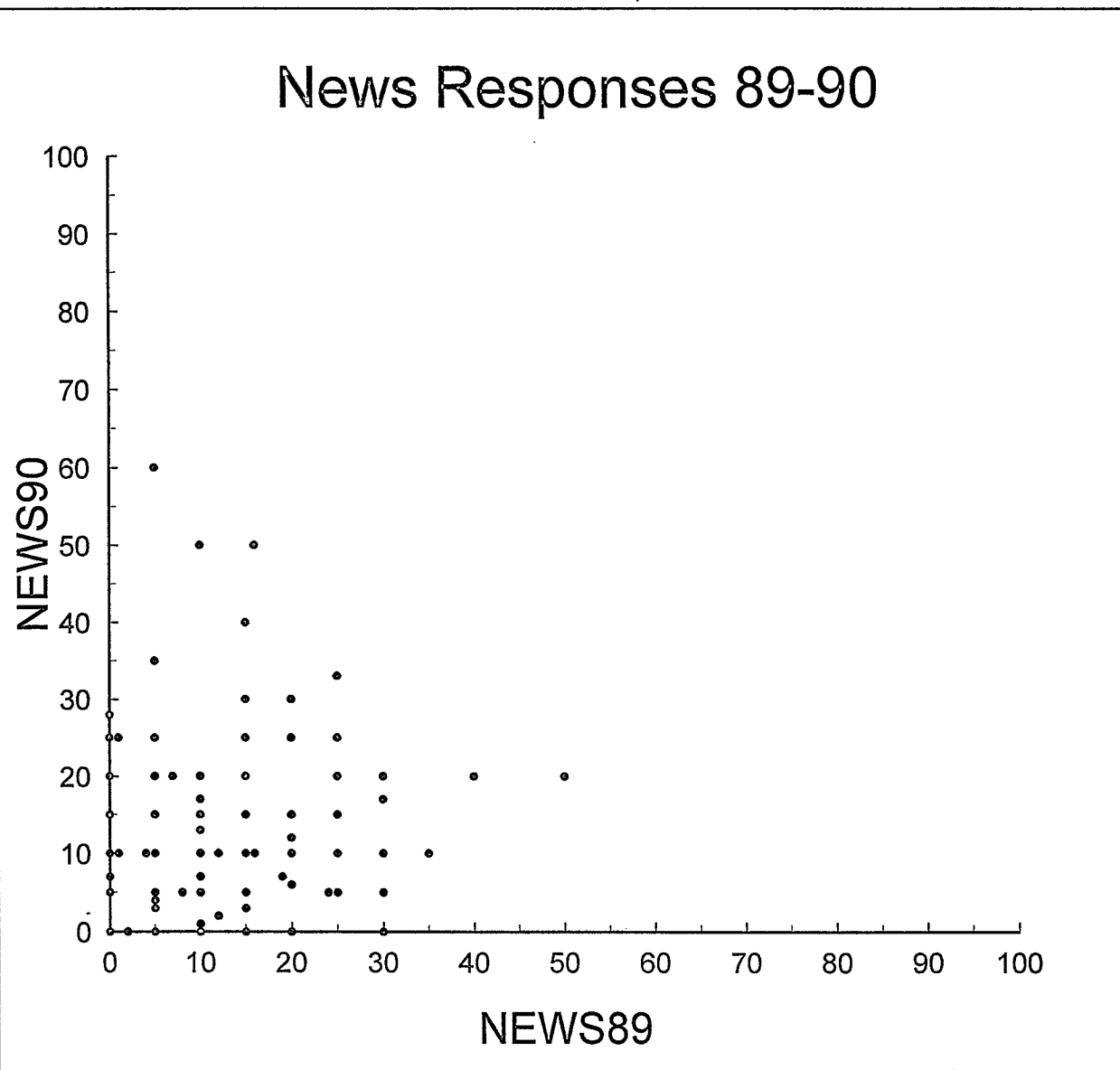


Graph 1

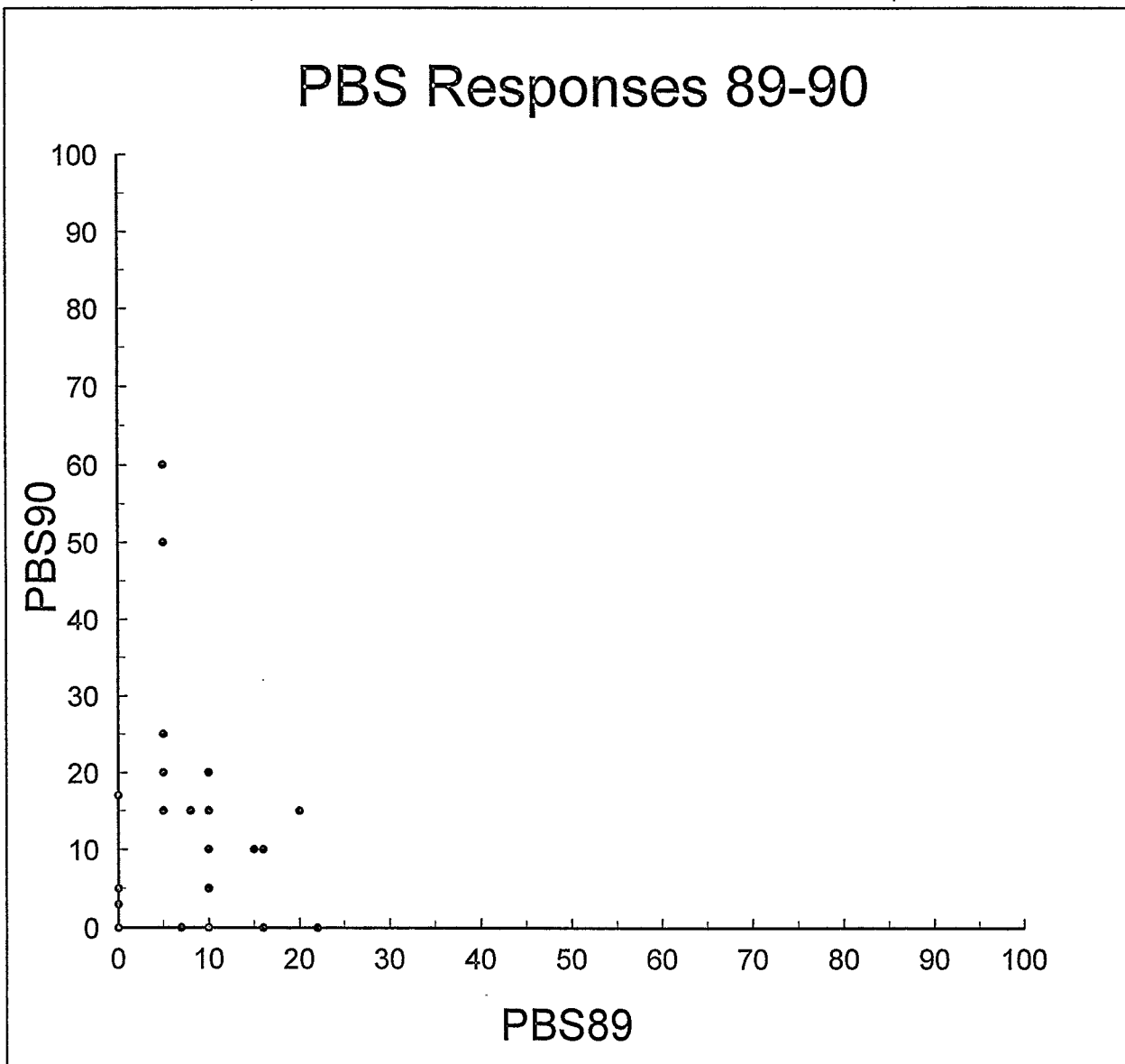




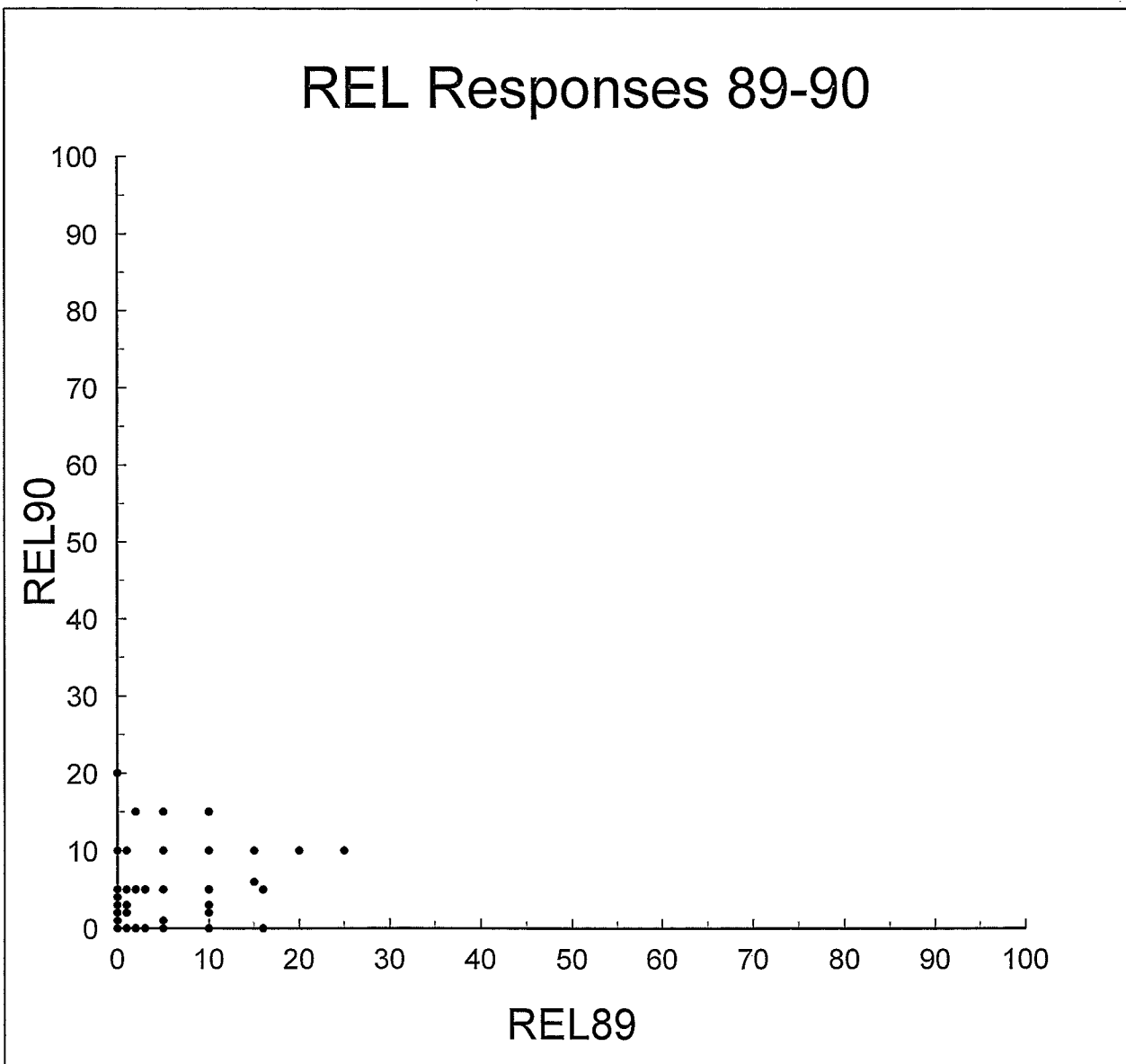


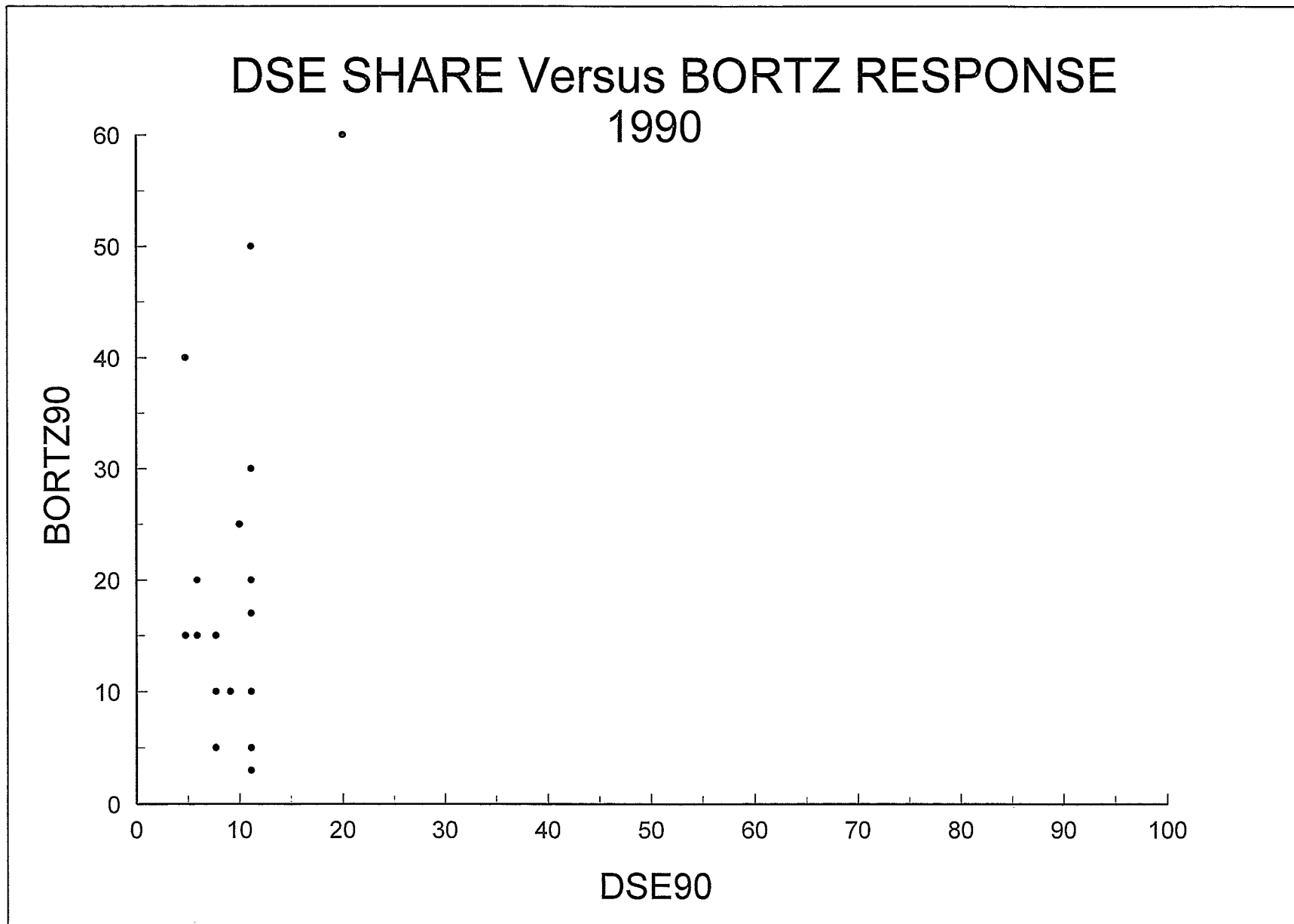


Graph 5

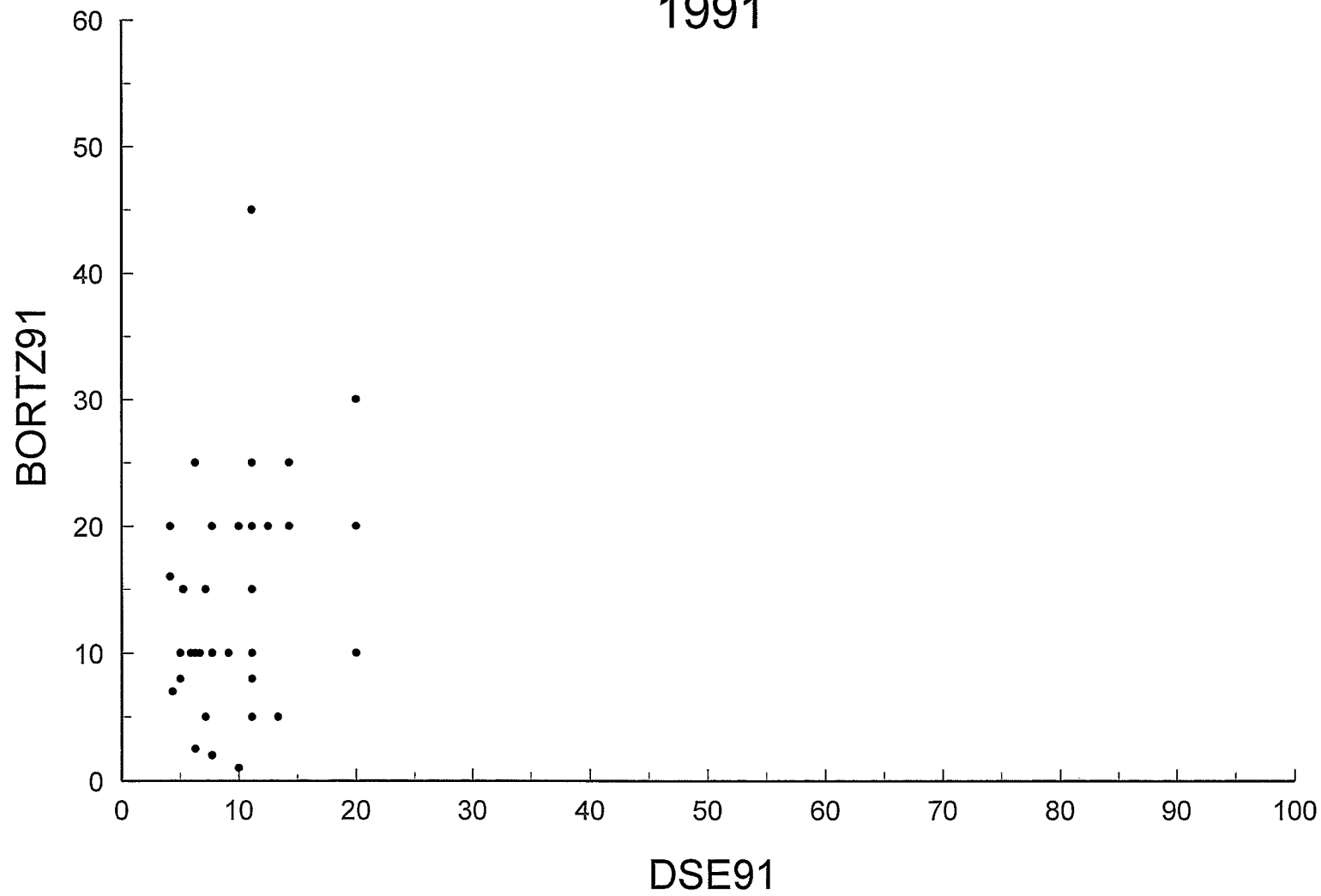


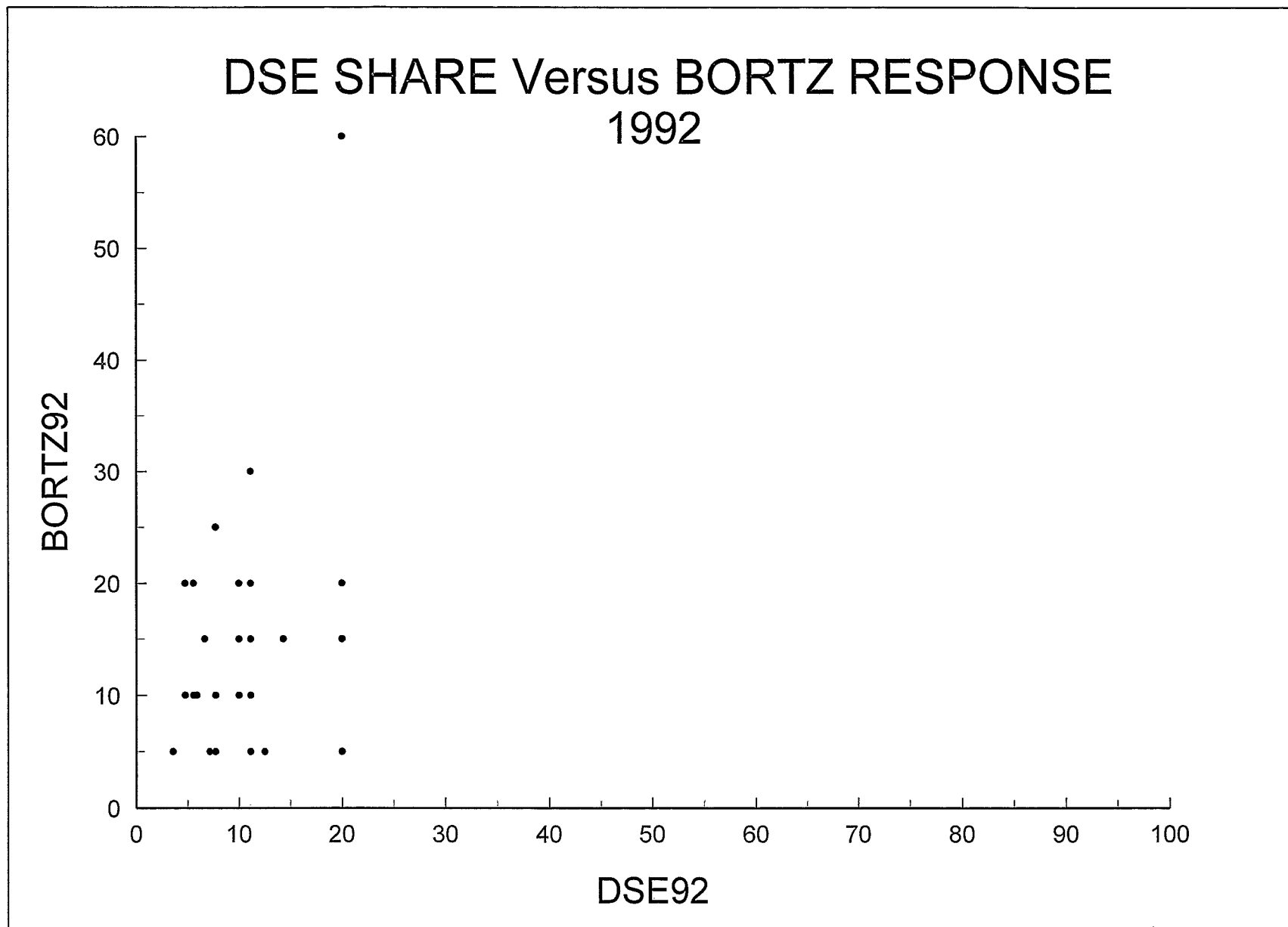
Graph 6





DSE SHARE Versus BORTZ RESPONSE 1991





**REBUTTAL TESTIMONY OF
MARSHA E. KESSLER**

During their direct case, Joint Sports Claimants (JSC) offered as evidence the Bortz Survey in which cable system operators conjectured on how they would apportion a programming budget among different program types if the operators had to have purchased their distant broadcast television programming during the period 1990-1992. JSC then suggested that the shares assigned to each program type be used as the basis for the Panel's allocation of the 1990-92 cable funds.

Various witnesses (JSC and others supporting Bortz) offered their perceptions regarding the merits of the survey. My general impression is that most willingly accepted as a potential allocation scheme the operators' speculations on how they might have behaved had the decision been theirs to make. Furthermore, most witnesses, when asked about potential misunderstandings between the Bortz program types and the Phase I program category definitions, indicated that any confusion occurred at the fringes and that misunderstandings about program types all probably "came out in the wash."

I disagree.

I indicated in my direct testimony before this Panel that a complete, in-depth understanding of the Phase I program categories is a critical element in the royalty allocation process. The degree of accuracy of any analysis, be it the Bortz survey or the Nielsen Study, depends on informed and experienced people performing the categorization tasks accurately.

In "the world according to CARP," everyday logic as to where individual programs could fit must be suspended in order to accommodate a more exacting and particular plan. Knee-jerk reactions are of little value here. In many cases, a different category is used for CARP purposes from what the real world would think. High school football games are not sporting events but rather local or station-produced. Church services are not religious programs but rather local or station-produced. The most widely-carried news and public affairs program in America, "Headline News" is not a news and public affairs program but a syndicated program. The process is not logical. It is contrary to instinct. But that's the way it is.

It is my understanding that respondents to the Bortz survey were read the various Bortz program types prior to making their evaluations. Supporters of the Bortz survey have testified that they believe these statements were adequate and that the operators understood the task before them. I, however, do not think that the operators could possibly have been able to make informed evaluations that can be used by the Panel.

My opinion is based on several factors. The first is my own experience in program categorization. I have been involved in this process since 1982. Even with 14 years' experience, I still have difficulty placing some programs in the proper category due to unclear or incomplete information regarding the proper CARP categorization. The cable operators responding to the Bortz survey do not have my experience. They cannot be expected to know and understand the proper categories.

The problem with wrestling programs on WTBS which I described in my direct testimony is a good example of problems found in categorization. This is not an academic problem, but one that could have a large impact on the results.

The station that contributed the most distant cable viewing -- almost 50%, in fact -- in Program Suppliers' 1990-92 Nielsen Studies was WTBS, Atlanta. During the period 1990-92, wrestling programs on WTBS received a relatively high amount of distant cable viewing. As the following figures (taken from Program Suppliers' 1990-92 Nielsen Studies) show, wrestling programs accounted for what to me seems to be a surprisingly high share of distant cable viewing on WTBS:

<u>Year</u>	<u>Viewing Minutes, Wrestling</u>	<u>Total Viewing, WTBS</u>	<u>Share</u>
1990	251,272	4,688,438	5.4%
1991	568,068	14,542,254	3.9%
1992	558,218	15,156,069	3.7

I still think of wrestling as a sport. Wrestling involves physical prowess and competition. People train to compete. There are winners and losers. The winners must defend their rankings. The losers seek to unseat the winners.

But in the world of CARP distribution, none of the wrestling programs are to be categorized as sports. Some of the WTBS wrestling programs fit in the Phase I local category. The rest are syndicated.

The Bortz survey does not contain a local (or station-produced as NAB would have it) program type, even though "local" is the established Phase I category. The Bortz term is "news and public affairs," which does not remotely approach the definition of local used for royalty distribution.

These categorizations would not be obvious to a person who does not deal with royalty distribution matters regularly. Cable operators have no reason to know about the Phase I categories. It is doubtful they would know proper categorization.

Program Suppliers Rebuttal Exhibit 1-R shows the effect of including wrestling on WTBS in the Sports category if cable operators thought of wrestling as a sports program. For purposes of defining the possible effects numerically, I used the viewing hours for wrestling to give an idea of how putting a program in the wrong category could affect the results. The Bortz survey offers no means for making adjustments to the final results if cable operators believed certain programs belonged in one category where in CARP reality, they belonged in another.

If the operator believed wrestling were associated with sports, this mistaken impression could have the effect of generally increasing his Sports valuation by half. The figures in Exhibit 1-R demonstrate that a misunderstanding with respect to the origin/use of very specific programming in 1990-92 could have had an eye-opening impact on claimants' shares as assigned by the cable operators.

In preparation for this testimony and at the request of Program Suppliers' witness Alan Rubin, I prepared a general analysis using data concerning program names and viewing numbers from our three Nielsen Studies. I made lists of programming broadcast by superstations WTBS, WGN and WWOR during 1990-92 that I feel could be subject to mis-categorization because their perceived nature differs from their CARP categorizations. I then grouped the results in two tables, shown here as Program Suppliers' Rebuttal Exhibits R-2 and R-3.

The results of this exercise suggest to me that we Program Suppliers are particularly vulnerable when there is confusion regarding the appropriate categorization of distant broadcast programming. It is very doubtful a cable operator mistakenly understood a live, professional or collegiate sporting event should be counted as a syndicated series. As the tables indicate, viewing attributable to news/public affairs programs (i.e., the Bortz type closest to the local

category) that might be confused with other types of programming is 685,083 viewing minutes. Viewing attributable to syndicated programming that might be confused with other types of programming is over three and a half times higher, or 2,509,151 viewing minutes.

This evidence suggests that the Program Supplier category is particularly disadvantaged by misunderstanding the program types. This conclusion is also supported by some of the underlying data from the Bortz survey provided to Program Suppliers by JSC during the discovery period.

Some of the questions were open-ended so that the respondents could identify programming other than the program types recited in the valuation question. Virtually all the open-ended answers are syndicated programming. Program Suppliers Rebuttal Exhibit R-4 lists some of the programs in the cable operators' responses:

Response: Hispanic/Spanish-language programming

Comments: Virtually all of the programming on Spanish-language stations belongs in the Program Supplier category.

Response: Cousteau

Comments: These programs on commercial stations belong to the syndicated program category. When broadcast by non-commercial station, the Cousteau programs are in the PBS category.

Response: National Geographic

Comments: Credit for broadcast by commercial stations goes to the syndicated program category. When broadcast is by non-commercial stations, the programs belong in the PBS category. Superstation WTBS broadcasts a variety of National Geographic programs, and the distant cable viewing to them is significant. As per the Nielsen Studies, viewing to the National Geographic programs accounts for between 2.6% and 3% of all viewing to WTBS.

Response: Home Shopping Network

Comment: This service, broadcast by many stations including WWOR, and infomercials in general, all belong in the syndicated program category.

Response: Fox Programming

Comment: Programming broadcast by the Fox stations is

categorized consistent with that broadcast by other independent sample stations. Although I have not done any specific analysis, I would expect that programs belonging to the syndicated program category would get the majority of both broadcast time and distant cable viewing on Fox stations.

Response: Childrens' cartoons

Comment: With the exception of cartoon programs broadcast by Canadian stations, virtually all animation belongs to the syndicated program category.

Response: Documentaries.

Comment: Documentaries can belong in all of the program types except Sports. (And there are documentaries about sports - they just do not belong in the sports category.) The syndicated program group has an abundance of documentaries about a variety of topics:

Health and social issues: "Silent Killer: Women and Heart Disease;" "Understanding HIV: Does Teen America Know the Facts?"; "Drug-Free Kids: A Parent's Guide" and "The Test Series," which included models for evaluating vision, aging, health, communicable diseases, and environmental issues.

Sports documentaries: "Baseball's Dream Team" and "The History of Auto Racing."

Documentaries about movie-making: "The Making of 'Dances With Wolves.'"

Historical documentaries: "Remembering Pearl Harbor."

Response: Family programming

Comment: Who knows what a cable operator meant by the term "family programming?" Is family programming defined by the lack of some element, e.g. sex or violence? Is it defined by the presence of something, e.g. baby animals and children who get good grades in school and always obey their parents?

The meaning of the designation "family programming" requires subjective judgements. Suffice it to say, however, that within the syndicated program category are a myriad of programs that fall into what I believe most would agree qualifies as family programming. Our claim covers entertainment programming such as "The Wonderful World of Disney." Our claim includes nature programs such as "The Wild World of Animals," "The Wild Kingdom," the Cousteau shows and

the National Geographic Specials which are viewed by men, women, teens and children. We have sitcoms galore. We have comedies like "Andy Griffith," "Abbott and Costello" and "The Three Stooges." Our movies "It's A Wonderful Life" and "The Wizard Of Oz" are classics in family entertainment. We have game shows. We have parades and fireworks shows. We have ice-skating shows. We have Christmas and Thanksgiving shows. We have historical and religious drama. Many, many of our programs appeal to audiences of all ages.

To the extent that a Bortz respondent was unclear about what constitutes "family programming" and why it did not fit into the other categories, I believe Program Suppliers' share was diminished in the Bortz survey measurements.

Response: Foreign-language programming

Comment: I am aware of stations in the U.S. with programming in Spanish, French, Portuguese, Greek, Chinese, Japanese, and Farsi. Foreign-language programming, however, on broadcast stations accounts for a very small portion of broadcast programming available to cable viewers in the U.S.

To my knowledge there are two parties whose claims include foreign-language programming -- Program Suppliers representing syndicators of Spanish-language programming broadcast on U.S. commercial stations and the Canadian claimants for French-language programming on Canadian stations carried in the U.S. as distant signals. My opinion is that in the U.S., of the two languages, there is far more programming in and viewing to Spanish- than French-language programs.

The mix of programming on Spanish-language stations is similar to that on English-language stations. This programming can be identified and sorted into types just as the programming on other independent stations. My experience with programming on Spanish-language stations is that it consists primarily of sitcoms, variety/entertainment programs and movies -- programming which falls squarely in the syndicated program category. To the extent that a cable operator does not understand the nature of programming on Spanish-language stations, our group does not receive our full credit for this programming in the Bortz survey.

Comment: Comedies

Response: When I think of comedies, I immediately assume a genre of programming that is almost exclusively Program Suppliers': "I Love Lucy," "Beverly Hillbillies," "The Honeymooners," "Married With Children," "All In The Family,"

"Designing Women," "The Jeffersons," "Three Stooges," "The Simpsons," "The Bullwinkle Show." I could go on and on. Old and new, animated and live action, adult- and family-oriented, the comedies belong in the Program Supplier group. To the extent that such programming was not appropriately assigned in the Bortz survey, it is the Program Suppliers whose share takes the biggest hit by this lack of understanding.

I do not know why cable operators thought certain programs did not fall into one of the Bortz program types. What I do know, however, is that it is Program Suppliers' material that was almost always mentioned as outside the Bortz listings.

Program Suppliers Rebuttal Exhibit R-5 consists of two tables. The table on the upper half of the page shows broadcast QH (the amount of time programming was on the air), for the three superstations WTBS, WGN and WWOR combined. The QH are then spread out between five program categories: local, syndicated, devotional, sports and other. The table on the lower half of the page is the same exercise, but the analysis is of viewing minutes.

What these tables show is that regardless of whether the measuring stick is broadcast time or viewing, it is Program Suppliers whose product is most frequently going out over-the-air (if the measurement is broadcast time) and whose programming is most heavily viewed (if the measurement is viewing). As per Program Suppliers Exhibit R-4, syndicated product represents roughly 80-83% of all programming on the air on the stations during that period. Similarly, our programming received roughly 85-86% of the viewing. Therefore, it seems reasonable that it was our group who was most vulnerable to errors when cable operators are unable to assign programming to a particular program type in answering the Bortz survey.

The errors committed by cable operators' misunderstanding the programming categories cannot be corrected. Unlike categorization errors in the Nielsen studies which can be specifically identified and corrected, errors in the Bortz survey are virtually impossible to identify or to correct. To the extent that Program Suppliers' programming takes up the lion's share of time and viewing, it is our group that has the most to lose when the categories are improperly understood.

Program Suppliers ask two things of the Panel. The first is that these observations regarding the vulnerability of Program Supplier product to undermeasurement in the Bortz survey be taken seriously. The second is to acknowledge that

it is likely respondents to the Bortz surveys did not consider many programs into their proper Phase I categories. Most often, what is syndicated under the royalty distribution definitions would be considered another program type in the real world. The potential result of such confusion is to lower the Bortz results for series while boosting the results for other program types. Syndicated series' loss was not offset by gains from other Bortz categories as might be the case for other program types.

I declare under penalty of perjury that the foregoing is true and correct to the best of my personal; knowledge.
Executed on February 15, 1996.

Marsha E. Kessler

Marsha E. Kessler

WRESTLING ON WTBS, 1990-92
The Effects of Assigning Wrestling to The Sports Category

	<u>1990</u>	<u>1991</u>	<u>1992</u>
Wrestling Programs/WTBS	251,272	586,068	558,218
Total viewing hours, WTBS	4,688,438	14,542,254	15,156,069
 Sports without wrestling	 217,032	 958,653	 1,079,250
Share of WTBS without wrestling	4.6%	6.6%	7.1%
Sports with wrestling	468,304	1,544,721	1,637,468
%-age increase to Sports w/wrestling	115.8%	61.1%	51.7%
Sports' share of WTBS, w/wrestling	10.0%	10.6%	10.8%

POTENTIAL CONFUSION REGARDING BORTZ SYNDICATED SERIES TYPE

<u>YEAR</u>	<u>STATION</u>	<u>SYNDICATED PROGRAM</u>	<u>OTHER POSSIBILITY</u>	<u>VIEWING</u>
1990	WGN	MIDNIGHT MASS	DEVOTIONAL	
1990	WGN	SUNDAY MASS	DEVOTIONAL	1,457
1990	WGN	\$100,000 FORTUNE HUNT	SYNDICATED	4,066
1990	WGN	AIR & WATER SHOW	SPORTS	830
1990	WGN	BOZO GRAND MARCH	SYNDICATED	
1990	WGN	HERITAGE OF FAITH	DEVOTIONAL	640
1990	WTBS	NWA WRESTLING POWER HR.	SPORTS	46,436
1990	WTBS	WRESTLING'S GREATEST HITS	SPORTS	4,638
1990	WTBS	YACHTING	SPORTS	1,580
1990	WTBS	GOODWILL GAMES	SPORTS	52,634
1990	WTBS	U.S. OLYMPIC GOLD	SPORTS	15,494
1990	WTBS	AMERICA'S CHOICE AWARDS	SYNDICATED	
1990	WTBS	TRACK AND FIELD	SPORTS	2,257
1990	WTBS	WRESTLING	SPORTS	19,616
1990	WWOR	XMAS MASS	DEVOTIONAL	0
1990	WWOR	GOLF SHOW	SPORTS	281
1990	WWOR	SUNDAY MASS	DEVOTIONAL	425
1990	WWOR	HOWARD STERN SUMMER SHOW	SYNDICATED	1,816
1991	WGN	CHRISTMAS EVE MIDNIGHT MASS	DEVOTIONAL	1,022
1991	WGN	BOZO CHRISTMAS	SYNDICATED	190
1991	WGN	MASS FOR SHUT-INS	DEVOTIONAL	733
1991	WGN	HERITAGE OF FAITH	DEVOTIONAL	2,135
1991	WGN	BEAT THE CHAMPS BOWLING	SPORTS	414
1991	WGN	\$100,000 FORTUNE HUNT	SYNDICATED	12,505
1991	WGN	PROTESTANT CHURCH SERVICE	DEVOTIONAL	107
1991	WTBS	U.S. OLYMPIC GOLD	SPORTS	54,840
1991	WTBS	PGA GRAND SLAM	SPORTS	
1991	WTBS	WRESTLING	SPORTS	83,676
1991	WWOR	CHRISTMAS MASS	DEVOTIONAL	
1991	WWOR	EASTER MASS	DEVOTIONAL	70
1992	WGN	\$100,000 FORTUNE HUNT	SYNDICATED	13,831
1992	WGN	MIDNIGHT MASS	DEVOTIONAL	514
1992	WGN	BEARS ROOKIE: PLAYING FOR KEEPS	SPORTS	403
1992	WGN	HERITAGE OF FAITH	DEVOTIONAL	221
1992	WGN	BEAT THE CHAMPS (BOWLING)	SPORTS	571
1992	WGN	UN-BELIEVE-BLL	SPORTS	767
1992	WGN	SUNDAY MASS	DEVOTIONAL	440
1992	WGN	CHRISTMAS AT CHRIST CHURCH	DEVOTIONAL	162
1992	WGN	BOZO CHRISTMAS	SYNDICATED	0

POTENTIAL CONFUSION REGARDING BORTZ SYNDICATED SERIES TYPE

<u>YEAR</u>	<u>STATION</u>	<u>SYNDICATED PROGRAM</u>	<u>OTHER POSSIBILITY</u>	<u>VIEWING</u>
1992	WTBS	WORLD CHAMPIONSHIP WRESTLING	SPORTS	72,405
1992	WTBS	WRESTLING	SPORTS	27,000
1992	WTBS	ATL BRAVES: AMERICA'S TEAM RETURNS	SPORTS	2,463
1992	WTBS	NBA DREAM TEAM	SPORTS	361
1992	WTBS	WCW SATURDAY NIGHT	SPORTS	108,299
1992	WTBS	U.S. OLYMPIC GOLD	SPORTS	52,791
1992	WTBS	CLASH..CHAMPIONS WRESTLING	SPORTS	30,777
1992	WTBS	OLYMPIC GOLD	SPORTS	2,792
1992	WTBS	WORLD CHAMPIONSHIP WRESTLING POWER HOUR	SPORTS	62,700
1992	WWOR	EASTER MASS	DEVOTIONAL	30
1992	WWOR	CHRISTMAS MASS	DEVOTIONAL	16
1992	WWOR	SUNDAY MASS	DEVOTIONAL	<u>678</u>
TOTAL, NEWS/PUBLIC AFFAIRS				685,083

POTENTIAL CONFUSION REGARDING BORTZ SYNDICATED SERIES TYPE

<u>YEAR</u>	<u>STATION</u>	<u>SYNDICATED PROGRAM</u>	<u>OTHER POSSIBILITY</u>	<u>VIEWING</u>
1990	WGN	THIS WEEK IN BASEBALL	SPORTS	3,203
1990	WGN	NWA WRESTLING	SPORTS	3,174
1990	WGN	BASEBALL: A LOOK AHEAD	SPORTS	
1990	WGN	A CHILD CALLED JESUS	DEVOTIONAL	
1990	WTBS	WORLD CHAMPIONSHIP WRESTLING	SPORTS	96,137
1990	WTBS	COUSTEAU PROGRAMS	PBS	12,147
1990	WTBS	HEADLINE NEWS	NEWS & PUBLIC	27,019
1990	WTBS	NWA MAIN EVENT WRESTLING	SPORTS	65,011
1990	WTBS	NATIONAL GEOGRAPHIC EXPLORER	PBS	123,515
1990	WTBS	AUTO RACING	SPORTS	20,686
1990	WTBS	WORLD OF AUDUBON	PBS	3,422
1990	WWOR	GREAT MOMENTS..NATIONAL GEOGRPHIC	PBS	
1990	WWOR	BEST..NAT. GEOGRAPHIC	PBS	0
1990	WWOR	THIS WEEK IN BASEBALL	SPORTS	0
1990	WWOR	WACKY WORLD OF SPORTS	SPORTS	211
1990	WWOR	EASTER MASS	DEVOTIONAL	
1990	WWOR	GOLF	SPORTS	165
1991	WGN	A CHILD CALLED JESUS	DEVOTIONAL	
1991	WGN	NWA WRESTLING	SPORTS	5,247
1991	WGN	WCW PRO WRESTLING	SPORTS	4,505
1991	WGN	THIS WEEK IN BASEBALL	SPORTS	9,322
1991	WGN	WRESTLING NETWORK	SPORTS	12,557
1991	WGN	BOB UECKERS WACKY WORLD OF SPORTS	SPORTS	1141
1991	WGN	WCW WRESTLING	SPORTS	16,051
1991	WGN	BASEBALL: A LOOK AHEAD	SPORTS	384
1991	WTBS	THIS WEEK IN BASEBALL	SPORTS	1,987
1991	WTBS	SETN NASCAR RACING	SPORTS	15,925
1991	WTBS	WORLD CHP WRST	SPORTS	47,657
1991	WTBS	WORLD CHAMPIONSHIP WRESTLING	SPORTS	190,408
1991	WTBS	WRLD CHP WRS B	SPORTS	12,256
1991	WTBS	WRESTLING NETWORK, THE	SPORTS	77,351
1991	WTBS	WCW MAIN EVENT WRESTLING	SPORTS	79,490
1991	WTBS	PGA GOLF	SPORTS	45,664
1991	WTBS	NATIONAL GEOGRAPHIC	PBS	432,317
1991	WTBS	WORLD CHAMPIONSHIP WRESTLING POWE	SPORTS	1,885
1991	WTBS	WORLD OF AUDUBON	PBS	18,511
1991	WTBS	WORLD CHP WRS2	SPORTS	23,006
1991	WTBS	COUSTEAU PROGRAMS	PBS	23,977

POTENTIAL CONFUSION REGARDING BORTZ SYNDICATED SERIES TYPE

<u>YEAR</u>	<u>STATION</u>	<u>SYNDICATED PROGRAM</u>	<u>OTHER POSSIBILITY</u>	<u>VIEWING</u>
1991	WTBS	NWA WRESTLING POWER HOUR	SPORTS	7,490
1991	WTBS	WCW POWER HOUR WRESTLING	SPORTS	30,921
1991	WTBS	AUTO RACING	SPORTS	32,407
1991	WTBS	GREATEST HEROES OF THE BIBLE	DEVOTIONAL	9,523
1991	WTBS	NWA MAIN EVENT WRESTLING	SPORTS	14,763
1991	WTBS	HEADLINE NEWS	NEWS & PUBLIC	63,941
1991	WWOR	COUSTEAU	PBS	531
1991	WWOR	THIS WEEK IN BASEBALL	SPORTS	
1992	WGN	WCW PRO WRESTLING	SPORTS	11,006
1992	WGN	INTERNATIONAL AUTOSHOW	SPORTS	234
1992	WGN	WRESTLING NETWORK	SPORTS	6,883
1992	WGN	BASEBALL: A LOOK AHEAD	SPORTS	542
1992	WGN	WCW WRESTLING	SPORTS	3,903
1992	WGN	SUPER DUPER BASEBALL BLOOPERS	SPORTS	551
1992	WGN	BASEBALL'S GREATEST MOMENTS	SPORTS	828
1992	WGN	PRO FOOTBALL WEEKLY	SPORTS	6,084
1992	WGN	GOLF SHOW	SPORTS	1,716
1992	WGN	ROAD TO THE WORLD SERIES	SPORTS	372
1992	WGN	THIS WEEK IN BASEBALL	SPORTS	7,732
1992	WTBS	COUSTEAU PROGRAMS	PBS	30,979
1992	WTBS	AUTO RACING	SPORTS	67,078
1992	WTBS	THIS WEEK IN BASEBALL	SPORTS	1,715
1992	WTBS	WRESTLING NETWORK	SPORTS	130,869
1992	WTBS	GOLF	SPORTS	33,694
1992	WTBS	NATIONAL GEOGRAPHIC	PBS	460,994
1992	WTBS	WORLD OF AUDUBON	PBS	18,709
1992	WTBS	WCW MAIN EVENT WRESTLING	SPORTS	126,168
1992	WTBS	HEADLINE NEWS	NEWS & PUBLIC	64,194
1992	WWOR	BEST..NAT. GEOGRAPHIC	PBS	4
1992	WWOR	THIS WEEK IN BASEBALL	SPORTS	185
1992	WWOR	BASEBALL: A LOOK AHEAD	SPORTS	0
1992	WWOR	GOLF SHOW	SPORTS	7
1992	WWOR	BASEBALL'S GREATEST MOMENTS	SPORTS	0
1992	WWOR	HOOP IT UP	SPORTS	202
1992	WWOR	COUSTEAU	PBS	<u>595</u>

TOTAL, SYNDICATED 2,509,151

1990 BORTZ SURVEY OPEN-ENDED RESPONSES

<u>QUESTIONNAIRE #</u>	<u>QUESTION #</u>	<u>RESPONSE</u>
30	2b	Hispanic programs; novela
61	3d	Jacques Cousteau
80	2b	Front (french?) speaking
	3d	Documentary
84	3d	Documentary
89	3d	National Geographic
112	3d	Telephones
140	3d	Special Premeire
144	2b	Family Programming
156	3d	J Cousteau
163	3d	Documentaries
166	3d	Family Oriented
186	2b	Cousteau & Nat'l Geographic
200	3d	Geographic Explorer
231	2b	Foreign Language

1991 BORTZ SURVEY OPEN-ENDED RESPONSES

<u>QUESTIONNAIRE #</u>	<u>QUESTION #</u>	<u>RESPONSE</u>
24	2b	Family programs
	3d	Childrens programs
55	2b	Family programming on WXTV
67	3d	National Geographic
90	2b	Nature
	3d	Nature programs
95	2b	Comedy Documentaries
103	3d	National Geographic
106	3d	Children's programs
107	3d	Documentaries
116	3d	Programming descriptions
136	3d	Children's programs
160	2b	Children programs
187	3d	Variety - Nat'l Geographic
201	3d	Nature Programming
204	3d	WGN Reading Program
214	2b	Documentaries
	3d	National Geographic
		Jacques Cousteau
218	2b	Children's Programming
241	3d	Family Programming
249	3d	Documentary
268	2b	None
273	2b	National Geographic
315	3d	Nat'l Geographic Explorer
347	2b	Educational Programs
351	3d	Home Shopping
356	2b	Enviromental Programming
	3d	Enviromental Programming

1992 BORTZ SURVEY OPEN-ENDED RESPONSES

<u>QUESTIONNAIRE #</u>	<u>QUESTION #</u>	<u>RESPONSE</u>
225	2b	Educational
265	2b	Childrens
	3d	Childrens
465	2b	French Programming
643	2b	Spanish Programming
792	3d	Nature, Nat'l Geographic Audobon Society
865	2b	Ethnic or Foreign language Programs
	3d	Ethnic Programming
1163	2b	Fox programming
1280	2b	Spanish language programming by WXTV
1434	3d	Children's programming
1413	2b	Ethnic Programming
	3d	Ethnic Programming
1469	3d	Nat Geographic
1447	2b	Children's

RELATIVE SHARES OF BROADCAST QH AND VIEWING MINUTES
WTBS, WGN, WWOR COMBINED
1990, 1991, 1992¹

<u>Category</u>	<u>Total QH,</u> <u>1990</u>	<u>%</u>	<u>Total QH,</u> <u>1991</u>	<u>%</u>	<u>Total QH,</u> <u>1992</u>	<u>%</u>
Local	3,792	11.76%	9,289	11.17%	9,680	9.19%
Syndicated	26,326	81.63	66,434	79.87	87,906	83.42
Devotional	476	1.48	1,768	2.13	1,760	1.67
Sports	1,653	5.13	5,548	6.67	5,937	5.63
Other	<u>2</u>	<u>0.00</u>	<u>135</u>	<u>0.16</u>	<u>98</u>	<u>0.09</u>
TOTAL, QH	32,249	100.0%	83,174	100.0%	105,381	100.0%

<u>Category</u>	<u>Total Viewing</u> <u>Minutes-1990</u>	<u>%</u>	<u>Total Viewing</u> <u>Minutes-1991</u>	<u>%</u>	<u>Total Viewing</u> <u>Minutes-1992</u>	<u>%</u>
Local	353,415	5.52%	769,661	3.99%	1,160,234	5.81%
Syndicated	5,476,495	85.55	16,557,414	85.83	16,775,491	84.03
Devotional	41,064	0.64	91,372	0.47	105,885	0.53
Sports	530,676	8.29	1,860,519	9.64	1,914,096	9.59
Other	<u>150</u>	<u>0.00</u>	<u>12,617</u>	<u>0.07</u>	<u>7,810</u>	<u>0.04</u>
TOTAL, VIEWING	6,401,800	100.0%	19,291,583	100.0%	19,963,516	100.0%

¹Source: 1990, 1991 and 1992 Special Nielsen Studies

Testimony of Alan M. Rubin, Ph.D.
to the Copyright Arbitration Royalty Panel
for the 1990, 1991, and 1992
Cable Royalty Distribution Proceedings
February 1996

Background

1. I am Professor and Graduate Coordinator in the School of Communication Studies at Kent State University. I am also immediate past chair of the University Research Council at Kent State University. I hold a Ph.D. degree with a concentration in Mass Communication from the Department of Speech Communication at the University of Illinois at Urbana-Champaign. My educational background includes substantial training in research methodology. I previously served for 4 years as the Editor of the *Journal of Broadcasting & Electronic Media*, a major national scholarly journal of research in the electronic media. I now serve as Editor-Elect of the *Journal of Communication*, a major international scholarly journal primarily devoted to mass communication research. I am also Advisory Editor in Mass Communication for Lawrence Erlbaum Associates, a leading academic book publisher. I have served on the Editorial Boards of eight scholarly Communication journals, and as a reviewer for ten other scholarly journals and several book publishers, professional associations, foundations, and government agencies.

I have taught and continue to teach communication research courses at the undergraduate, master's, and doctoral levels. I have designed and conducted many research investigations. I have coauthored a text on communication research (now in its fourth edition), served as associate editor for a book profiling the validity and reliability of communication research measures, published more than 55 journal articles and book chapters, and presented more than 60 conference papers. I have been invited to speak at universities throughout the U.S. and Europe. I have appeared as an expert witness on two occasions before the Copyright Royalty Tribunal on behalf of the Motion Picture Association of America. My research has focused on audience uses and effects of the electronic media. My attached curriculum vitae also identifies consulting experience for media, organizations, and publishers.

2. I have read: the August 1993 Bortz exhibit, "Cable Operator Valuation of Distant Signal Non-Network Programming"; the August 1995 Bortz exhibit, "History and Analysis of the CRT Cable Operator Surveys: 1978-1993"; the August 1995 written

testimony of Paul Bortz; the Kagan Media Appraisals Report, "Comparison of Viewing Hours and Market Value Data for Cable Network Programming: 1990-1992"; the written statement of Richard Ducey; the August 1995 Ford and Ringold exhibit, "The Value of Canadian Programming to Cable Systems in the United States: 1991-1994"; and pp. 6-10 of the written testimony of Michael Salinger and pp. 6831-6846 of the 1/25/96 CARP condensed transcript of the testimony of Michael Salinger.

3. In this testimony, I will examine: (a) the clarity and accuracy of the program categories used in the Sports and Canadian surveys; (b) the needs in conducting effective survey research, including knowledgeable and cooperative respondents, viable samples, length of administration, instructions, and question order; (c) the use of the constant-sum technique in audience research; and (d) the question of "value," and whether it lies in cable operators' perceptions of the audience, as well as the issue of viewer avidity. I will refer to the Bortz and Burke surveys as the Sports surveys and to the Ford and Ringold surveys as the Canadian surveys.

Program Categories

4. To prevent confusion and erroneous responses, questionnaires must have clear, unambiguous response categories. The categories must be precise, exhaustive, and mutually exclusive. This is not always the case with the program categories in the Sports and Canadian surveys. Some categories overlap. For example, PBS is a channel on a cable system, not a program. Some programs on PBS include documentaries, nature programs, news and public affairs, syndicated series, and movies. A respondent may be confused as to whether to assign a budgetary percentage for documentaries and nature programs to syndicated series or to PBS. A respondent may also exclude some news and public affairs from syndicated series. Respondents also might perceive the sports and syndicated categories to overlap, despite the word "live" preceding the description of "professional and college sports." In a fast telephone survey, the respondent might not hear or heed a descriptive word such as "live."

5. The program categories used in the Sports and Canadian surveys have the potential for confusion and inappropriate perceptions and placement of distant-signal syndicated programs. This potential for confusing the programs and categories is echoed in Richard Ducey's statement. Ducey states that public affairs talk shows, children's programs, news magazine and interview shows, sports, documentaries, and specials are all typical station-produced programs that may be "retransmitted along with syndicated shows . . ." (p. 3). What the Sports and Canadian surveys and the Ducey statement do not say is that many news magazine, interview, children's programs, documentary, sports, and talk shows are syndicated shows that may be retransmitted as distant signals.

Because of such confusion, it is reasonable to expect that respondents may easily misplace retransmitted syndicated programs in some other category. There is certainly the possibility for misinterpretation whereby a distant-signal syndicated program may have been mistakenly placed in a news, sports, or other category. It is reasonable to suggest that syndicated shows on WTBS, WGN, and WWOR such as World Championship Wrestling, This Week in Baseball, Auto Racing, PGA Golf, U.S. Olympic Gold, and the like may have been placed in a Sports-related rather than a Syndicated Programs category. A syndicated show on WTBS such as Headline News may have been placed in a News-related category rather than a Syndicated Programs category. Syndicated shows on WTBS or WWOR such as National Geographic, Cousteau, or World of Audubon, may have been placed in a PBS rather than a Syndicated Programs category.

6. The Sports and Canadian program categories and Richard Ducey's statement differ from the program categories defined by the Copyright Royalty Tribunal in 1984. As compared to the Sports and Canadian surveys, the CRT definitions more clearly distinguish, for example, between "syndicated series and specials" and "local programs."¹ It would have been preferable to distinguish the program options more clearly and to provide examples or additional descriptions for clarity, and to have the options more closely resemble the CRT definitions. The Sports survey did add some additional description to the categories for the 1992 surveys, but that was not adequate to solve the problem.

7. The Canadian surveys fail to provide parallel or equivalent categories. Option 1 (National Hockey League hockey and Major League Baseball) and Option 4 (for example, Canadian Football League) provide precise types within a broader genre; they are concrete examples for a respondent to comprehend and to react to. Option 3 (U.S. syndicated series and movies), though, presents two, imprecise and less concrete genres without precise referents as stimuli for a response. Option 3 also combines two broad and diverse categories together. This should reduce the relative valuation that each genre could receive if it were separated from the other and given precise enumeration.

In the Canadian surveys, then, the structure and wording of the response options should contribute immeasurably to the extreme differences we see in the question regarding valuations on superstations and independent stations as compared with those for Canadian signals. Movies and Syndicated Series are valued substantially higher than Live Professional and College Sports when comparing the generic category responses for superstations and independent stations (that is, when comparing apples and apples). Only when comparing apples (that is, broad, generic, combined categories) with oranges (that is, precise and more meaningful categories of specific types of sporting events) do we see reduced valuation for the general and combined Movies and Syndicated Series Category (pp. 4-5). (The only exception is for the 1993 addition of the children's programming category to the independent and superstation procedure. However, most children's programming would probably be in the syndicated category.) This renders the valuation

conclusion praising sports and Canadian programs at the expense of U.S. syndicated shows and movies meaningless and misguided (p. 6).

Because of the difference in the Canadian surveys in how sports was measured on Canadian signals versus independent or superstation signals, it is erroneous to conclude that there is consistency in the value assigned by cable operators for sports (p. 24). They would need to use the same or equivalent measures to reach that conclusion.

Survey Research

8. To be effective, survey research requires that respondents have the knowledge to be able to answer the questions being asked. The Canadian surveys present a particular concern in this regard. It is uncertain what level of knowledge all respondents to the Canadian surveys had about programming and budget allocation.

Ford and Ringold argue that their sample is experienced in the cable industry (pp. 24, 30). However, looking at the 1993 English-language sample data, for example, we find that 32% worked in the cable industry for fewer than 10 years, 39% worked for their cable system for fewer than five years, and 36% had three or fewer years in their present job. The latter two percentages are similar for 1991 (32% and 41%) and 1992 (35% and 35%). I'm not sure if it is just a flaw in the coding of the data, but the 1992 English-language sample data indicate that only 3 out of 25 respondents stated they were responsible for the 1990-91 programming season. And, the 1991 English-language sample data indicate that 1 out of every 5 respondents said they were not the distant-signal decision maker.

9. According to the Bortz August 1995 CRT History report, even the Sports surveys may have a similar limitation. These surveys allowed the questionnaires to be completed by someone other than a general manager or programming director from nearly one-quarter to about one-half the time (pp. 28, 35, 41). Several surveys across the three years were, in fact, completed by office managers, public relations directors, public affairs directors, or chief technicians. Were these really the people at the system who were always most familiar with or knowledgeable about programming and budgeting decisions? Would even marketing managers fall within this most knowledgeable group for program budgeting?

10. To be effective, survey research relies on the goodwill and voluntary cooperation of respondents to answer questions honestly and accurately. Although the completion rate was over 70% for the Sports final constant-sum question, even a 75% completion rate raises questions about the representativeness of all responses because we are missing representatives of one-quarter of the universe. In addition, some members of the chosen samples were either difficult to reach or not eager to cooperate. Standard

survey research procedures specify a precise number of *callbacks* if an interviewer fails to get a successfully completed survey from a selected member of the sample. In their *Mass Media Research* book, Roger Wimmer and Joseph Dominick specify that we usually make "no more than two" callbacks (p. 126).² In their *Survey Research* book, Charles Backstrom and Gerald Hursh-Cesar also tell us that "95% of all telephone interviews are successfully completed within three calls," and that they "generally permit" only two callbacks, but allow up to four (p. 134).³ Such numbers are set beforehand for practical reasons (for example, cost) and to systematize procedures. Survey researchers need to prevent undue harassment from too many callbacks that may lead to invalid responses. If a respondent believes that the persistent caller is not going to give up, the harassed participant may simply comply hastily to get the ordeal over with.

Satisfactory completion rates, by themselves, then, do not guarantee good data. The methods used to secure that completion rate may, in fact, provide questionable data. Surely, there would be little commitment among the Sports survey participants who probably perceived little personal benefit to provide accurate data in the brief telephone interviews. That commitment would be even less for those who needed to be contacted numerous times. Whatever commitment we have will often diminish the longer the participant is kept on the phone, especially by the time we reach the final constant-sum question.

Even though Bortz claims that most questionnaires were completed in one or two direct contacts, we need to know about the potential harassing impact of numerous indirect contacts. For example, the 1990 Sports survey averaged 9.2 callbacks for each respondent; 55 respondents received 10 or more callbacks, and one respondent was subjected to 58 callbacks. The 1991 Sports survey averaged 9.4 callbacks for each respondent; 75 respondents received 10 or more callbacks, with the maximum number being 33 callbacks for that year. The 1992 Sports survey averaged 9.0 callbacks for each respondent; the maximum number was back up to 50 callbacks; 65 respondents received 10 or more callbacks). How would we like to walk into our offices and find constant written or voice phone messages over a 3 or 4 month period reminding us that someone is trying to reach us to conduct a survey? Surely, that will not lend us to be eager and cooperative research participants.

11. The interview for the Sports surveys was certainly an imposition to some who were asked to respond several times during consecutive years. We need to recall that for some operators, their systems were not randomly chosen but were included in an annual census of large Form 3 cable systems. This is also the case with the systems chosen in the Canadian surveys. This presents us with several additional problems in the administration of these surveys, one being peculiar to the Canadian surveys.

12. First, Ford and Ringold indicate that they eliminated systems that no longer carried Canadian signals. Wouldn't this inflate the Canadian-program value of the remaining "retrospective" responses (that is, looking back 2 years) for systems that

retained these signals (p. 9)? Presumably, these signals would have been dropped because they weren't "valued." This process eliminated 22.2% of English-language systems in the 1992 Canadian survey. How would we know if the remaining 77.8% of systems accurately reflected the universe of systems in 1990?

13. This idea of projecting responses to other systems not in a sample leads us to a second problem. In his August 1995 written testimony Paul Bortz states that, "Sample systems were randomly selected for each stratum . . ." (p. 19). However, the Sports and Canadian surveys included a census of at least some cable systems. Therefore, we cannot generalize our estimate of the values identified in the survey to the rest of the systems in the universe (for example, the \$250,000+ Royalty Stratum Form 3 cable systems that refused to participate in the Sports surveys). In other words, participants are not randomly selected for a census, and, therefore, we cannot estimate how different a system that refuses to participate might be from systems in the census that choose to participate. An estimate of sampling error only applies to randomly selected samples, not to censuses. In addition, only a very small number of systems were included in the Canadian surveys; they averaged only 46 respondents per year.

14. Third, a survey of all respondents should be administered in as short a period as possible to prevent external or environmental events from contaminating responses. This potential threat to the internal validity of a survey is known as "history." The longer time period for a survey means that we produce an uneven playing field whereby societal events may render the meanings or context of questions to be different to participants who complete the questionnaires at different points in time. To prevent external events from biasing the results of our surveys, we typically want to have the administration of a survey completed in a very short period, often within a few days or a week.

Regrettably, this is not the case with the Sports surveys. The 1990 survey lasted for 13 weeks (averaging less than two completed interviews per day). The 1991 survey lasted for over 9 weeks (averaging three completed interviews per day). The 1992 survey lasted for 18 weeks (averaging less than two completed interviews per day). The surveys went from as early as early-December to as late as early-May: 1990 (December 26, 1990 to March 26, 1991); 1991 (March 4, 1992 to May 7, 1992); and 1992 (December 9, 1992 to April 13, 1993).

The fact that the surveys went on into March, April, and May still introduces a problem with recall into the equation. If Bortz or Ford and Ringold want to argue that the budget exercise in the final constant-sum question reflects actual budgeting behavior, then respondents are still being asked in March 1991 to recall back to some time in 1989 when 1990 budget decisions would be made, or in May 1992 to recall back to some time in 1990 when 1991 budget decisions would be made, or in April 1993 to recall back to some time in 1991 when the 1992 budget decisions would be made. Recall hinders the accuracy of the estimates being provided.

15. In addition, researchers such as Daniel Dyan and Elihu Katz have spoken of major televised sporting events, such as live broadcasts of the Olympics and the Super Bowl, as being "media events" (pp. 1-9).⁴ These are important and popular events, which are planned, announced, and heavily advertised and promoted. They draw people together and provide opportunities for celebration. They become salient parts of our culture for brief but heightened periods of time. In other words, they are major societal events that create a climate of anticipation and can influence our perceptions.

The Sports surveys, which inappropriately lasted for 9, 13, or 18 weeks, encountered three to five such major media sports events. Surely, the climate for responses can be exaggerated by false perceptions of the importance or value of televised sports carried on distant signals. These major sports media events are usually carried on the broadcast or cable networks, and not on distant signals. However, the climate of perceptions created by such media events can lead to over-estimating the televised value of sports, regardless of whether or not a question asks only about distant signals. The Sports surveys would have been unduly influenced by such a climate of opinion for the College Football bowl games, the Super Bowl, the Final Four College Basketball tournament, the NBA All Star game, and even the Winter Olympics.

16. Such a problem may have been compounded by the instructions to respondents. Survey research requires that instructions to interviewers and respondents be very clear. The Sports surveys typically asked respondents to evaluate non-network programming on the distant signals. However, there is potential for confusion when respondents are reminded to exclude broadcast networks (that is, ABC, CBS, and NBC), but are not reminded to exclude cable networks. Respondents should have been reminded to exclude cable networks such as ESPN and CNN, especially at the beginning of the crucial constant-sum question. Omission of such a reminder may have inflated the value of sports and news if respondents misunderstood the instructions.

17. To be effective, survey research must also control the order in which questions are presented. It does so to prevent both fatigue and earlier questions from affecting responses to later questions. Given the brevity of the Sports surveys, fatigue should not have been a factor. This is not the case with the Canadian surveys. The chore of completing the interview must have been tedious. The constant-sum task had to be repeated three to six times in 1991, and five to nine times in 1992 for respondents to the Canadian surveys. It would be easier for respondents to say that the relative value hadn't changed since 1989 (or since 1990) just so they wouldn't have to repeat the constant-sum technique, again and again (that is, to get the ordeal over with and collect the \$50).

The question order, though, affects the Canadian and Sports surveys. The fact that the critical constant-sum question is the final question in these surveys is a serious concern. Earlier questions about subscriber popularity, advertising, and promotion may have influenced responses to this final question. These earlier questions, in fact, defined

for the respondents what the interviewer meant by "value." In other words, when answering the constant-sum questions, "value" now means that programming should be popular and used in the system's advertising and promotion. That, however, is not how Bortz defined "value" in his written testimony. To Bortz, "value" means "ability to attract and retain subscribers" and "programming economics" (p. 14). The Sports and Canadian questionnaires needed to control for these possible order effects by rotating the position of questions.

Constant-Sum Technique

18. Constant-sum techniques intend to allow respondents to order and to compare how they distribute their responses across several categories or choices. They need to permit the person to visualize, to reconsider, and to reorder priorities such as the distribution of dollars among program categories. The constant-sum technique is a more valid procedure in face-to-face interviews, which heighten the respondent's ability to visualize, reconsider, and reorder priorities, and allows the interviewer to oversee and control the process.

The constant-sum technique is more wisely used in face-to-face interviews where respondents can visualize their options. In a *Journal of Advertising* study, Joel Axelrod cautioned that the constant-sum scale is a measure that we should use only "if *personal* interviews can be obtained" (p. 8).⁵ In personal interviews, the interviewers have face-to-face control over the use of visual aids that make constant sum a more viable technique. Personal interviewers can, for example, present cards to the respondents and ask them to order and re-order the cards until they are satisfied with the task.

Over the telephone, interviewers can suggest to respondents that they write down category labels, but they have little control over whether that is actually done, or done effectively. The category labels also would have excluded the fuller descriptions provided in the 1992 Sports surveys. Axelrod recommended the constant-sum technique only for personal, face-to-face interviewing. Over the telephone he recommended the use of other, less complicated techniques: first choice, first brand awareness, paired comparison, and first advertising recall.

Similarly, in a *Journal of Marketing* study, Russell Haley and Peter Case conducted all of their 630 interviews with those responsible for buying groceries in person, in the respondents' homes.⁶ Haley and Case had each respondent divide 10 pennies among brands, giving more to brands she liked. This took place in in-home, face-to-face, personal interviews.

The method of data collection, then, is a serious concern in the Sports and Canadian surveys. The constant-sum technique is more reliable in personal, face-to-face

interviews than over the telephone. In face-to-face interviews respondents can visually be presented with the alternative choices. The several stations and five to seven programming choices in these surveys may have been too much for respondents to keep in mind during the phone questioning and budget allocation (even if the interviewer suggested writing down the categories labels).

19. Haley and Case also noted that the constant-sum scale did not behave in a manner consistent with most attitude scales used in advertising research. Responses to the constant-sum scale showed a clustering of answers toward the less favorable side of the distribution. This suggests that the constant-sum technique does not achieve a normal distribution. They found that, "a high rating for one brand is likely to mean lower ratings for the others" (p. 26). The constant-sum scale restricts the number of strongly positive responses; "as more points were given to one brand, fewer were available for others" (p. 29). Haley and Case found a few "particularly attractive" measures in advertising research including verbal purchase intent and paired comparison (p. 31). The constant-sum scale was not one of these attractive measures.

The utility of the constant-sum technique varies based on how it is administered (for example, via telephone or face-to-face interviewing). As Axelrod suggested, we should use the constant-sum technique only with personal, face-to-face interviewing. And, based on Haley and Case's observations, the lack of normally distributed responses limits the application of statistical techniques that can be applied to data gathered via a constant-sum measure.

20. Researchers must use valid and reliable measures. To be reliable a measure must deliver consistent results. To be valid, a measure must serve its intended purpose? The validity of any measure rests with how adequately the concept (for example, "value") is defined. Although a measure may appear to have face validity (that is, tap the attribute it purports to measure on the surface), it may lack predictive validity. For example, are the constant-sum measures used in the Sports and Canadian surveys able to define "value" and to predict what consumers most value or choose to view when using cable television?

21. The validity of the constant-sum technique also depends on whether the perceptions or comparative judgments lead to actual behavior. A measure can be reliable (that is, deliver consistent results), even if it is not valid (that is, measure the intended concept, "value" in this instance, and predict the expected behavior). Whereby an audience member watching a particular program is a behavior, the Sports and Canadian surveys use the constant-sum question in a hypothetical budgeting exercise for cable operators to value categories of programs. The constant sum exercise in these surveys does not tap actual behavior of budgeting channels for a cable system.

22. In the *Foundations of Behavioral Research*, Fred Kerlinger discusses different types of measures.⁷ Normative measures are those usually found in tests and scales (pp. 463-464). They are relatively unaffected by answers to other questions because responses

can vary independently (for example, a respondent can specify whether he or she strongly agrees or strongly disagrees with each individual item). Normative measures are interpreted via the mean and standard deviation of the distribution of a group of scores. Individual normative measures have different means and standard deviations.

Ipsative measures, on the other hand, are comparative measures such as those found in rank-order comparisons, paired comparisons, forced-choice comparisons, and constant-sum techniques. They are systematically affected by responses to other items. Ipsative measures do not have separate mean and standard deviation scores. Each individual's set of measures has the same mean and standard deviation. For example, if one has to rank 5 items (such as a categories of programs) on a scale of 1 (that is, least valued) to 5 (that is, most valued), the sum (15), mean (3), and standard deviation (1.41) of the ranks will always be the same.

Ipsative measures, then, have built-in, systematic restraints. For example, if you assign \$50 of \$100 to one category of programs, you only have \$50 left to assign to the other categories. It is questionable whether usual parametric statistics can be applied because such statistics depend on assumptions such as normal distributions and independence of elements that ipsative procedures, such as the constant-sum technique, violate.

23. Kevin Clancy and Robert Garsen summarized several problems with comparative scales such as the constant-sum technique in the *Journal of Advertising Research*.⁸ First, there is no independent "absolute" score, so we cannot effectively compare responses across time to other absolute scores (that is, each score is relative to its own distribution). Second, even though all categories may be disliked, some may be rated higher than others, thus, implying that one is preferred more than another. Third, lesser known products are presented on an equal footing with better known products, and, therefore, may be overweighted at the expense of the better know product. This works to lessen differences between responses. Fourth, differences may be maximized or exaggerated unrealistically, as in paired comparisons.

24. There are at least three concerns with using the constant-sum technique in the Sports and Canadian surveys. First, we cannot tell which program choices are overweighted or underweighted when compared with other budget decisions. Second, we have no independent, absolute scores to allow us to compare these responses effectively across different surveys. Each response is relative to its own distribution of numbers.

Third, if respondents defer from assigning a zero to any category (that is, feel that all categories deserve some value), then the measure lacks a true or absolute zero point (that is, the complete absence of value). In this instance, zero would be an arbitrary point on the scale, and we cannot even compute ratios between responses. So, we cannot say that a value of \$10 assigned to a news category is twice as much as a value of \$5 assigned to a PBS category. These would just be ordinal or rank-order data, that is, one

category is rank-ordered higher than another in terms of perceived value, much like an IQ of 150 is higher than an IQ of 75 or that 50 degrees is warmer than 25 degrees, but it is not twice as high or twice as warm. There is no true zero point for intelligence or for Fahrenheit temperature. However, we could say that someone who weighs 200 pounds weighs twice as much as someone who weighs 100 pounds or that someone who watches 4 hours of television watches twice as much television as someone who watches for 2 hours. There are true zero points for weight and for time.

Ford and Ringold treat the Canadian data and Bortz treats the Sports data as if the responses to the constant-sum categories are independent of one another. They are not. And, they treat the data as if they had absolute zero points in all instances. They do not. Responses to one category affect responses to all other categories. This prevents assumptions of independence of data and restricts the utility of the data. I question whether we really can have independent comparisons of the perceived values of categories of programs. It is a stretch to say that a percentage of a perceived value represents an average dollar amount, or that one category can be compared as a ratio of another category.

25. Although in his written testimony Michael Salinger suggests that question 4 in the Bortz survey "was a reasonable way to ask for prices" (p. 8), it is also possible to suggest that the crucial "value" question could have been asked differently. Instead of having respondents do a budgeting exercise, it may have been less complicated and preferable simply to have respondents assign a point total or dollar amount to each category independent of the others. For example, "Using a scale whereby 0 represents absolutely no value, and 100 represents the most value, assign a number to each of the following categories of distant signal programs to indicate its value to your cable system." Such a technique would be clear and straightforward. It would produce more readily comparable normative data. The researchers could then use these independent, ratio level scores to depict the relative value of each category of programs across all questionnaires.

Value in Viewership

26. According to Paul Bortz's written testimony, "value" lies with the "ability to attract and retain subscribers" (p. 14). Research tells us that, besides better reception, greater program variety and more movies are the primary reasons for subscribing to cable television.⁹ If I don't own a satellite dish and want to watch the programs of a certain distant signal, I would have to subscribe to my local cable system. We cannot ignore the "value" that these programs on the distant signals have for those who actually watch the programs. Distant signals are essentially packages of programs that are sold to and retransmitted by cable systems. The programs, not the signals in and of themselves, are what subscribers select to watch. If they choose not to watch a program on a distant signal, that program would not have value to them. If the programs do not have

sufficient value for the viewers, they will not continue to subscribe to a cable system. It would appear, then, that to assess the value of programming on distant signals, we should be examining what subscribers actually view, not someone else's perceptions of subscribers' preferences.

27. In his written statement, Richard Ducey argues that it is only the judgment of the cable operators that matters "regardless of the extent to which they have accurately gauged their subscribers' ultimate preferences . . ." (p. 5). Ducey further argues that, "Cable operators want the greatest number of subscribers on a continuing basis, regardless of how many subscribers watch particular programs or the channels carrying them" (p. 7). This sort of reasoning suggests that, if cable operators make poor decisions by misjudging their subscribers' preferences and providing programming that does not attract or retain them, we should attach "value" to the cable operators' actions. That does not sound prudent. If you ignore audience preferences, you're dead on the air.

28. Ducey also cites some of my writings to advance his argument that, "Not all television viewing is equally important to viewers and that viewers tend to have a special relationship with television newscasts" (p. 10). I cannot quibble with the first part of the statement. All behaviors are not equally important to people. I would rephrase the second part to say that, "viewers tend to have a special relationship with favorite media personalities, including television newscasters."

29. Ducey continues by mentioning differences in *instrumental* and *ritualized* uses of television. These are differences I began to explore in research studies published in 1983 and 1984.¹⁰ Primarily, instrumental use is more goal-directed than ritualized use, and is typically linked to selecting and watching certain media content such as news, talk shows, or magazine shows to be informed. Many of these programs, of course, are not just station-produced local news shows, but are syndicated information and entertainment programs. We have also found, however, that instrumental viewing is linked to watching other types of television programs such as soap operas.¹¹ In one study he cites, we found that watching for excitement, entertainment, and relaxation predicted greater levels of satisfaction with one's favorite soap opera.¹² In fact, these motives for watching, and not information, were linked to feelings of a "special relationship" or *parasocial interaction* (that is, friendship, attraction, and empathy) with a favorite soap opera character.

30. Ducey continues to address our writings that speak to parasocial interaction. Regrettably, he mentions only a trade magazine summary piece that focuses mostly on the "formation of special relationships with the presenters in television newscasts" (p. 13).¹³ In that essay we say that: "Television is an intimate and personal communication medium (and that) . . . television personalities become know acquaintances" (p. 15). We also state that parasocial interaction "is an important communication relationship between audience member and media personality" (p. 18). The essay summarized and expanded upon one of our early studies in this area which sought to learn whether such relationships develop from feelings of loneliness.¹⁴ Parasocial interaction, then, is an

emotional bond that someone feels with a media personality. The personality need not be a newscaster. Soap opera characters, situation comedy performers, and other entertainment celebrities are also the recipients of such affective reactions from viewers, and have been the objects of other of our research studies.¹⁵

The point of this body of research is that types of viewing orientation (that is, instrumental and ritualized viewing) and levels of involvement (for example, parasocial interaction) mediate the potential impact of watching television. The purpose is not simply to tell us who watches news. And, despite Ducey's statement that audience ratings cannot be used to distinguish instrumental from ritualized viewing, instrumental viewing is often linked to greater amounts of viewing of the selected programs.

31. The Canadian surveys include an additional curious indicator of "value." It is reasonable to suggest that most signals carried by a cable system should bring in more revenues than they cost, otherwise the system would be operating at a deficit. Most businesses need to produce a profit to survive. Most signals should be cost effective and/or viewed by subscribers if they are to be retained. So, questions like, "My cable system carries a Canadian signal like _____ because it brings in more subscriber revenue than it costs" (or "in order to attract and retain subscribers"), would tend to produce more confirming than disconfirming responses. They are not meaningful or valid measures of "value" (that is, they do not really measure "value").

32. The Kagan Report presents us with a contrary, but equally curious definition of "value": programming expenses divided by viewing share. So, the greater the programming expenses and the smaller the viewing share, the greater the value. That may be indicative of the cost of programming, but does it actually represent value? The problem is compounded by the Kagan Report suggesting that sports is "valued" because it is not a cost-effective buy. The report even presents data to support larger declines in audience shares from 1989 to 1992 for ESPN (which lost 12.5% of its audience share) as compared with, for example, USA (which lost only 0.7%) and Nickelodeon (which lost only 1.5%) (p. 15). It even goes so far as to show that Major League Baseball on ESPN and the National Basketball Association on TNT lost 35.5% of their combined share of audience from 1989 to 1992), whereas non-sports programming on USA, TNT, Nickelodeon, the Family Channel, and Lifetime lost only 0.4% (p. 17). Wouldn't programming be more valued in a business climate if it were cost-effective? Wouldn't it be more valued if it secured larger viewing shares?

Conclusion

33. In sum, the Sports and Canadian surveys raise questions about the validity of the constant-sum technique with respect to assessing the value of programs. Several of the concerns involve: (a) the lack of clear and consistent definitions for the program

categories; (b) the possible placement of syndicated programs in sports, news, or other categories for purpose of valuation; (c) the questionable knowledge about program budgeting by some who responded to the surveys; (d) the use of a census rather than a representative sample for at least parts of the survey; (e) the extended time period for data collection; (f) the extreme number of callbacks made to potential respondents; (g) the use of telephone rather than face-to-face interviews for collecting data, providing questionable predictive validity; (h) the use of a hypothetical exercise removed many months from actual budgeting behavior; (i) the lack of normative data from the constant-sum value measurement; and (j) the issues surrounding the determination of value.

Notes

¹ The CRT provides the following definitions of "syndicated series" and "local programs" in the 1984 Cable Royalty Distribution Proceeding (Docket No. CRT 85-4-84CD, p. 40): "**Syndicated series and specials** within the Program Suppliers category are 1) programs licensed to and broadcast by at least one commercial television station during the calendar year in question; 2) programs produced by or for a broadcast station and which is broadcast by two or more broadcast stations during the calendar year in question; 3) programs produced by or for a broadcast station which are comprised predominantly of syndicated elements, such as music video shows, cartoon shows, 'PM Magazine,' and locally-hosted movie shows. **Local programs** within the Commercial Television category are programs produced by or for one commercial television station, broadcast by that one station only in the calendar year in question and not coming within the exceptions described in (3) of the Program Suppliers definition."

² Wimmer, R. D., & Dominick, J. R. (1994). *Mass media research* (4th ed.). Belmont, CA: Wadsworth.

³ Backstrom, C. H., & Hursh-Cesar, G. D. (1981). *Survey research* (2nd ed.). New York: Wiley.

⁴ Dayan, D., & Katz, E. (1992). *Media events: The live broadcast of history*. Cambridge, MA: Harvard University Press.

⁵ Axelrod, J. (1968). Attitude measures that predict purchase. *Journal of Advertising*, 8(1), 3-17.

⁶ Haley, R. I., & Case, P. B. (1979). Testing thirteen attitude scales for agreement and brand discrimination. *Journal of Marketing*, 43(4), 20-32.

⁷ Kerlinger, F. N. (1986). *Foundations of behavioral research* (3rd ed.). New York: Holt, Rinehart and Winston.

⁸ Clancy, K. J., & Garsen, R. (1970). Why some scales predict better. *Journal of Advertising Research*, 10(5), 33-38.

⁹ Umphrey, D. (1988). Segmenting the cable audience by reason for subscribing. *Journalism Quarterly*, 65, 972-975. Umphrey, D. (1989). A comparison of cable disconnecters and subscribers. *Journalism Quarterly*, 66, 628-631, 779.

¹⁰ Rubin, A. M. (1983). Television uses and gratifications: The interactions of viewing patterns and motivations. *Journal of Broadcasting*, 27, 37-51. Rubin, A. M.

(1984). Ritualized and instrumental television viewing. *Journal of Communication*, 34(3), 67-77.

¹¹ Rubin, A. M., & Perse, E. M. (1987). Audience activity and soap opera involvement: A uses and effects investigation. *Human Communication Research*, 14, 246-268.

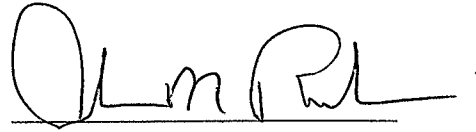
¹² Perse, E. M., & Rubin, A. M. (1988). Audience activity and satisfaction with favorite television soap opera. *Journalism Quarterly*, 65, 368-375.

¹³ Rubin, A. M., Powell, R. A., & Perse, E. M. (1986). Television news: The on-air family? *BPME Image*, 2(9), 14-18.

¹⁴ Rubin, A. M., Perse, E. M., & Powell, R. A. (1985). Loneliness, parasocial interaction, and local television news viewing. *Human Communication Research*, 12, 155-180.

¹⁵ Rubin & Perse (1987); Perse & Rubin (1988).

I declare under penalty of perjury that the foregoing testimony is true and correct and of my personal knowledge. Executed on February 14, 1996.

A handwritten signature in black ink, appearing to read 'Alan M. Rubin', written over a horizontal line.

Alan M. Rubin

A L A N M. R U B I N

Address

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Kent State University
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Kent, Ohio 44242-0001
Tel: (216) 672-2659
Fax: (216) 672-3510
E-mail: ARUBIN@KENTVM.KENT.EDU

Home: 1280 Greenwood Avenue
Kent, Ohio 44240-6306
(216) 678-1493

Educational Background

Ph.D., Speech Communication, University of Illinois at Urbana-Champaign, 1976. Concentration in the social influence of mass and political communication. Dissertation: A developmental examination of the uses of television by children and adolescents.

M.A., Communication Theory and Media, Queens College of the City University of New York, 1972. Thesis: The relationship between political ideology and poll effectiveness on the influence of public opinion polls among newer voters.

B.A., Queens College of the City University of New York, 1969. Major: Communication and Political Science. Graduated with honors in Communication Arts and Sciences.

Academic Experience

since 1982 Professor, School of Communication Studies (since 1989);
Director of Graduate Studies (since 1992); Associate Professor
(1982-1989); Kent State University; P.O. Box 5190; Kent, OH
44242-0001

1981-1982 Assistant Professor, Department of Communication, Cleveland
State University, Cleveland, OH 44115

1977-1981 Assistant Professor, Communication Discipline, University of
Wisconsin-Parkside, Kenosha, WI 53141

1975-1977 Assistant Professor, Department of Speech and Drama, Georgia
Southern College, Statesboro, GA 30458

1972-1975 Teaching and Research Assistant, Department of Speech
Communication, University of Illinois, Urbana, IL 61801

1970- Lecturer, part-time, Department of Communication Arts and
1972 Sciences, Queens College, CUNY, Flushing, NY 11367

Editorships

Editor-Elect, *Journal of Communication*, since 1995

Advisory Editor, Mass Communication, Lawrence Erlbaum Associates, since
1986

Editor, *Journal of Broadcasting & Electronic Media*, 1985-1988

Review and Criticism Editor, *Journal of Broadcasting*, 1983-1984

Publications: Books and Chapters

Rubin, A. M. (1996). Foreword. In N. Signorielli (Ed.), *Women in communication: A bio-bibliographic sourcebook*. Westport, CT: Greenwood Press, in press.

Rubin, A. M., & Rubin, R. B. (1996). Assessing information gathering. In W. G. Christ (Ed.), *Media education assessment handbook*. Hillsdale, NJ: Lawrence Erlbaum Associates, in press.

Rubin, R. B., Rubin, A. M., & Piele, L. J. (1996). *Communication research: Strategies and sources* (4th ed). Belmont, CA: Wadsworth Publishing Company.

Rubin, A. M. (Assoc. Ed.). (1994). *Communication research measures: A sourcebook*. New York: Guilford Press.

Rubin, A. M. (1994). Media uses and effects: A uses-and-gratifications perspective. In J. Bryant & D. Zillmann (Eds.), *Media effects: Advances in theory and research* (pp. 417-436). Hillsdale, NJ: Lawrence Erlbaum Associates.

Rubin, A. M., & Perse, E. M. (1994). Measures of mass communication. In R. B. Rubin, P. Palmgreen, & H. E. Sypher (Eds.), *Communication research measures: A sourcebook* (pp. 37-56). New York: Guilford Press.

Rubin, R. B., Rubin, A. M., & Piele, L. J. (1993). *Communication research: Strategies and sources* (3rd ed). Belmont, CA: Wadsworth Publishing Company.

Rubin, R. B., Rubin, A. M., & Piele, L. J. (1990). *Communication research: Strategies and sources* (2nd ed). Belmont, CA: Wadsworth Publishing Company.

- Rubin, A. M., & Bantz, C. R. (1989). Uses and gratifications of videocassette recorders. In J. L. Salvaggio & J. Bryant (Eds.), *Media use in the information age: Emerging patterns of adoption and consumer use* (pp. 181-195). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rubin, A. M., & Rubin, R. B. (1989). Social and psychological antecedents of VCR use. In M. R. Levy (Ed.), *The VCR age: Home video and mass communication* (pp. 92-111). Newbury Park, CA: Sage Publications.
- Rubin, A. M. (1988). Mass media and aging. In C. W. Carmichael, C. H. Botan, & R. Hawkins (Eds.), *Human communication and the aging process* (pp. 155-165). Prospect Heights, IL: Waveland Press.
- Rubin, A. M. (1986). Uses, gratifications, and media effects research. In J. Bryant & D. Zillmann (Eds.), *Perspectives on media effects* (pp. 281-301). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Rubin, R. B., Rubin, A. M., & Piele, L. J. (1986). *Communication research: Strategies and sources* (4th ed). Belmont, CA: Wadsworth Publishing Company.
- Rubin, A. M. (1985). Media gratifications through the life cycle. In K. E. Rosengren, L. A. Wenner, & P. Palmgreen (Eds.), *Media gratifications research: Current perspectives* (pp. 195-208). Beverly Hills, CA: Sage Publications.
- Rubin, A. M. (1985). Uses and gratifications: Quasi-functional analysis. In J. R. Dominick & J. E. Fletcher (Eds.), *Broadcasting research methods* (pp. 202-220). Boston: Allyn and Bacon.
- Rubin, R. B., & Rubin, A. M. (1982). Contextual age and television use: Re-examining a life-position indicator. In M. Burgoon (Ed.), *Communication yearbook 6* (pp. 583-604). Beverly Hills, CA: Sage Publications.
- Rubin, A. M. (1981). Stratified samples, cluster samples, and face-to-face interviewing. In J. E. Fletcher (Ed.), *Handbook of radio and television broadcasting: Research procedures in audience, program and revenues* (pp. 72-86). New York: Van Nostrand Reinhold.

Publications: Articles

- Rubin, A. M. (1993). Audience activity and media use. *Communication Monographs*, 60(1), 98-105.
- Rubin, A. M. (1993). The effect of locus of control on communication motivation, anxiety, and satisfaction. *Communication Quarterly*, 41(2), 161-171.
- Rubin, R. B., Rubin, A. M., & Martin, M. M. (1993). The role of self-disclosure and self-awareness in affinity-seeking competence. *Communication Research Reports*, 10(2), 115-127.

- Hamilton, N. F., & Rubin, A. M. (1992). The influence of religiosity on television use. *Journalism Quarterly*, 69(3), 667-678.
- Rubin, A. M., & Rubin, R. B. (1992). Call-in talk radio in den USA. *Rundfunk und Fernsehen*, 40(3), 385-397.
- Rubin, R. B., & Rubin, A. M. (1992). Antecedents of interpersonal communication motivation. *Communication Quarterly*, 40(3), 305-317.
- Conway, J. C., & Rubin, A. M. (1991). Psychological predictors of television viewing motivation. *Communication Research*, 18(4), 443-463.
- Rubin, A. M. (1991). Publication and the flow of information in communication. *Journal of Broadcasting & Electronic Media*, 35(1), 119-123.
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- Armstrong, C. B., & Rubin, A. M. (1989). Talk radio as interpersonal communication. *Journal of Communication*, 39(2), 84-94.
- Rubin, R. B., & Rubin, A. M. (1989). Communication apprehension and satisfaction in interpersonal relationships. *Communication Research Reports*, 6(1), 13-20.
- Perse, E. M., & Rubin, A. M. (1988). Audience activity and satisfaction with favorite television soap opera. *Journalism Quarterly*, 65(2), 368-375.
- Rubin, A. M. (1988). Bashing academia, again: The Roper report. *Feedback*, 29(3), 37-40.
- Rubin, A. M., Perse, E. M., & Taylor, D. S. (1988). A methodological examination of cultivation. *Communication Research*, 15(2), 107-134.
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- Rubin, A. M., & Perse, E. M. (1987). Audience activity and soap opera involvement: A uses and effects investigation. *Human Communication Research*, 14(2), 246-268.
- Rubin, A. M., & Perse, E. M. (1987). Audience activity and television news gratifications. *Communication Research*, 14(1), 58-84.
- Rubin, A. M. (1986). Age and family control influences on children's television viewing. *Southern Speech Communication Journal*, 52(1), 35-51.
- Rubin, A. M. (1986). Television, aging and information seeking. *Language & Communication*, 6(1/2), 125-137.
- Rubin, A. M., Powell, R. A., & Perse, E. M. (1986). Television news: The on-air family? *BPME Image*, 2(9), 14-18. (Reprinted in *RTNDA Intercom*, 1987, 4[5])

- Rubin, A. M., & Rubin, R. B. (1986). Contextual age as a life-position index. *International Journal of Aging and Human Development*, 23(1), 27-45.
- Rubin, A. M., & Windahl, S. (1986). The uses and dependency model of mass communication. *Critical Studies in Mass Communication*, 3(2), 184-199.
- Rubin, R. B., Rubin, A. M., Perse, E. M., Armstrong, C., McHugh, M., & Faix, N. (1986). Media use and meaning of music video. *Journalism Quarterly*, 63(2), 353-359.
- Rubin, A. M. (1985). Research and graduate education in communication. *Feedback*, 27(2), 33-36.
- Rubin, A. M. (1985). Uses of daytime television soap operas by college students. *Journal of Broadcasting & Electronic Media*, 29(3), 241-258.
- Rubin, A. M., Perse, E. M., & Powell, R. A. (1985). Loneliness, parasocial interaction, and local television news viewing. *Human Communication Research*, 12(2), 155-180.
- Rubin, A. M., & Rubin, R. B. (1985). Interface of personal and mediated communication: A research agenda. *Critical Studies in Mass Communication*, 2(1), 36-53.
- Rubin, A. M. (1984). Ritualized and instrumental television viewing. *Journal of Communication*, 34(3), 67-77.
- Rubin, A. M. (1983). Television uses and gratifications: The interactions of viewing patterns and motivations. *Journal of Broadcasting*, 27(1), 37-51.
- Rubin, A. M. (1982). Directions in television and aging research. *Journal of Broadcasting*, 26(2), 537-551.
- Rubin, A. M. (1982). The new media: Potential uses and impact of the new technologies for children's learning. *Educational Technology*, 22(12), 5-9.
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- Rubin, A. M., & Rubin, R. B. (1982). Older persons' TV viewing patterns and motivations. *Communication Research*, 9(2), 287-313.
- Rubin, A. M. (1981). An examination of television viewing motivations. *Communication Research*, 8(2), 141-165.
- Rubin, A. M. (1981). Measurement strategies and the use of videotape recording in communication competence assessment. *Journal of the Wisconsin Communication Association*, 11, 25-31.
- Rubin, A. M. (1981). A multivariate analysis of "60 Minutes" viewing motivations. *Journalism Quarterly*, 58(4), 529-534.

- Rubin, A. M., & Rubin, R. B. (1981). Age, context and television use. *Journal of Broadcasting*, 25(1), 1-13.
- Rubin, A. M. (1980). Patterns in age differences. [In Research in Radio Symposium] *Feedback*, 22(2), 5-10.
- Rubin, A. M. (1979). Television use by children and adolescents. *Human Communication Research*, 5(2), 109-120.
- Rubin, A. M. (1978). Child and adolescent television use and political socialization. *Journalism Quarterly*, 55(1), 125-129.
- Rubin, A. M. (1977). Children as opinion leaders for their peers. *North Carolina Journal of Speech and Drama*, 10, 22-31.
- Rubin, A. M. (1977). Television usage, attitudes and viewing behaviors of children and adolescents. *Journal of Broadcasting*, 21(3), 355-369.
- Rubin, A. M. (1976). Television in children's political socialization. *Journal of Broadcasting*, 20(1), 51-60.
- Rubin, A. M., & Rubin, R. B. (1975). An examination of the constituent elements of a presently occurring rhetorical situation. *Central States Speech Journal*, 26(2), 133-141.

Publications: Notes and Reviews

- Rubin, A. M. (1988). Moving on: 1988 editor's annual report. *Journal of Broadcasting & Electronic Media*, 32(4), 507-511.
- Rubin, A. M. (1988, Fall). The teaching of theory and methods are tightly interwoven. *CT&M Newsletter*, pp. 1, 6.
- Rubin, A. M. (1987). 1987 editor's annual report. *Journal of Broadcasting & Electronic Media*, 31(3), 363-367.
- Rubin, A. M. (1987, Fall). Teaching committee seeks ideas. *CT&M Newsletter*, p. 3.
- Rubin, A. M. (1986). 1986 editor's annual report. *Journal of Broadcasting & Electronic Media*, 30(3), 373-378.
- Rubin, A. M. (1985). Continuity and change. *Journal of Broadcasting & Electronic Media*, 29(1), 1-4.
- Rubin, A. M. (1985). Editor's annual report. *Journal of Broadcasting & Electronic Media*, 29(2), 237-240.
- Rubin, A. M. (1985). Journal of Broadcasting & Electronic Media: A Report from the editor. *Feedback*, 26(4), 29-30.
- Rubin, A. M. (1983). Review and criticism editor's note. *Journal of Broadcasting*, 27(2), 191.

Rubin, A. M. (1979). Review of *Air Time* by R. J. Seidle. *Journal of Broadcasting*, 23(1), 102-103.

Rubin, A. M. (1978). Review of *The Media Environment* by R. H. Stanley & C. S. Steinberg. *Journal of Broadcasting*, 22(4), 548-549.

Grants and Reports

Research Grant, *Television usage and aging*, American Broadcasting Companies, Inc., 1980.

Grants, Center for Teaching Excellence, University of Wisconsin-Parkside, 1979, 1980.

Rubin, A. M., & Windahl, S. (1982). *Mass media uses and dependency: A social systems approach to uses and gratifications*. [Media Panel Report No. 21.] Lund, Sweden: University of Lund.

Rubin, A. M., & Rubin, R. B. (1980). *Television usage and aging*. [Report of a research project supported by the American Broadcasting Companies, Inc.] Kenosha, WI: University of Wisconsin-Parkside.

Expert Witness

Expert Witness, Testimony, Copyright Royalty Tribunal, 1989 Copyright Royalty Distribution Proceeding, Docket No. CRT91-2-89CD, Washington, DC, 1991.

Expert Witness, Testimony, Copyright Royalty Tribunal, 1983 Copyright Royalty Distribution Proceeding, Docket No. CRT84-1-83CD, Washington, DC, 1985.

Conference Papers

Since 1975 I have presented over 60 papers at the meetings of the:

American Educational Research Association
Association for Education in Journalism & Mass Communication
Broadcast Education Association
Central States Communication Association
Eastern Communication Association
International Communication Association
Southern States Communication Association
Speech Communication Association
Speech Communication Association of Ohio
Western States Communication Association
Wisconsin Communication Association
World Communication Association.

Conference Programs

Since 1980 I have participated in over 45 programs at meetings of the:

Association for Education in Journalism & Mass Communication
Broadcast Education Association
Central States Communication Association
Eastern Communication Association
International Communication Association
Southern States Communication Association
Speech Communication Association
Speech Communication Association of Ohio
Wisconsin Communication Association
World Communication Association.

Invited Addresses and Lectures

Since 1981 I have presented over 20 invited lectures, addresses, symposia, or colloquia on Media Uses and Gratifications, Audience Involvement with the Media, Personal and Mediated Communication, Media and Popular Culture, and Communication and Aging at:

Bremen University (Germany)
Friedrich Alexander University (Erlangen-Nurnberg, Germany)
Hannover College of Music, Theater, and Journalism (Germany)
Hans Bredow Institute for Radio and Television at the University of Hamburg (Germany)
Indiana University (USA)
Johannes Guttenberg University of Mainz (Germany)
Ohio University (USA)
University of Florida (USA)
University of Fribourg (Switzerland)
University of Georgia (USA)
University of Gothenburg (Sweden)
University of Hohenheim (Stuttgart, Germany)
University of Kentucky (USA)
University of Lund (Sweden)
University of Nijmegen (the Netherlands)
University of Pennsylvania (USA)
University of Salzburg (Austria)
University of Stockholm (Sweden)

Editorial Boards

Communication Education, since 1990
Communication Quarterly, since 1991
Communication Monographs, 1992-1995
Communication Reports, 1993-1994
Human Communication Research, 1989-1992
Journal of Applied Communication Research, 1989-1993

Journal of Broadcasting & Electronic Media, 1980-1984, since 1989
Mass Communication Review Yearbook, 1984-1988

Other Review Activities

Communication Education, 1981
Communication Monographs, 1986, 1988, 1991
Communication Quarterly, 1985
Communication Reports, 1992
Communication Research, 1981, 1982, 1985, 1987-1989, 1991, 1994, 1995
Communication Studies, 1994, 1995
Communication Yearbook, 1994, 1995
Critical Studies in Mass Communication, 1984, 1985
Feedback, 1982
Human Communication Research, 1981, 1982, 1986-1988, 1994
Journalism Quarterly, 1987, 1988, 1993
Journal of Broadcasting, 1978-1980
Journal of Communication, 1984-1987, 1991, 1992, 1994
Political Communication, 1993
Southern Speech Communication Journal, 1988, 1995
Western Journal of Communication, 1983, 1992
Commission on Communication and Aging, Speech Communication Association, 1983
Communication Theory and Methodology Division, Association for Education in Journalism and Mass Communication, 1982, 1987, 1989
John Simon Guggenheim Memorial Foundation, New York, 1986
Lawrence Erlbaum Associates, 1995
Mass Communication Division, International Communication Association, 1980, 1981, 1983-1990, 1992, 1994
Mass Communication Division, Speech Communication Association, 1983-1985, 1991, 1994, 1995
Mass Communication Interest Group, Central States Speech Association, 1985
McGraw-Hill Publishing Company, 1983
Non-Divisional Proposals, International Communication Association, 1982
Social Sciences and Humanities Research Council of Canada, 1983, 1992
Research Award Program, City University of New York, 1985
Wadsworth Publishing Company, 1979-1981, 1985

Professional Consulting

Cable Television Research, Motion Picture Association of America, Encino, CA, 1985, 1991-1993, 1995-present
Cable Television Research, Copyright Collective of Canada, Toronto, Canada, 1992
Communication Competency Assessment Instrument, Speech Communication Association, 1982

Daytime Television Serial Research, American Broadcasting Companies, Inc.,
1982

Radio Audience Research, WRJN Radio, Racine, WI, 1978-1979, 1980-1981

Closed-Circuit Video Programming, St. Mary's Medical Center, Racine, WI,
1978-1979

Professional Association Offices and Committees

Dissertation Award Committee, Mass Communication Division, International
Communication Association, 1994

Federation Prize Committee, Central States Communication Association, 1994

Task Force on the Future of the Association, Broadcast Education
Association, 1991-1992

Chair, Teaching Committee, Communication Theory and Methodology Division,
Association for Education in Journalism and Mass Communication, 1987-
1988

Liaison Committee, International Communication Association, 1983-1986

Mass Communication Division Liaison, Research Board, Speech Communication
Association, 1984-1985

Nominating Committee, Speech Communication Association, 1984-1985

Legislative Council, Speech Communication Association, 1983-1985

Nominating Committee, Mass Communication Division, Speech Communication
Association, 1983-1985

Chair, Mass Communication Division, Speech Communication Association, 1983-
1984

Secretary, Mass Communication Division, International Communication
Association, 1982-1984

Convention Program Planning Committee, Speech Communication Association,
1982-1983

Research Committee, Commission on Communication and Aging, Speech
Communication Association, 1982-1983

Vice Chair, Mass Communication Division, Speech Communication Association,
1982-1983 (Vice Chair-Elect, 1981-1982)

Nominating Committee, Mass Communication Division, Speech Communication
Association, 1979-1980

Other Professional Activities

External Personnel Referee, Michigan State University, University of Kansas, 1996

External Personnel Referee, Purdue University, 1995

External Personnel Referee, Bowling Green State University, George Mason University, Towson State University, University of Dayton, 1994

Educational/Cultural Exchange, Sponsored by Kent State University and the *Guang Ming Daily*, People's Republic of China, 1993

External Personnel Referee, Bowling Green State University, 1993

External Personnel Referee, University of Delaware, University of Denver, 1991

External Personnel Referee, Emerson College, University of Connecticut, 1990

External Personnel Referee, Indiana University, 1989

External Personnel Referee, Purdue University, University of Maryland, University of Wisconsin, 1988

External Review Committee, Department of Speech Communication, Denison University, Granville, OH, March 1988

External Personnel Referee, Florida State University, University of Connecticut, University of Denver, University of Florida, University of Kentucky, 1987

External Personnel Referee, Colorado State University, Indiana University, University of Alabama, 1986.

External Personnel Referee, Cleveland State University, Ohio University, University of California-Santa Barbara, University of Kentucky, University of Michigan, 1985

External Personnel Referee, University of Massachusetts, 1984

Advisory Board, WCSB Radio, Cleveland State University, 1981-1982

Executive Producer, *Women in communication*, video interview series, University of Wisconsin-Parkside, Racine [Wisconsin] Telecable, 1979-1980

Executive Producer, *Parkside perspective*, video news and features series, University of Wisconsin-Parkside, Racine [Wisconsin] Telecable, 1978-1979

Steering Committee, Children's Television Program, WMVS/WMVT Public Television, Milwaukee, WI 1978-1979

Executive Producer, *The southern scene*, video news and features series,
Georgia Southern College, Statesboro [Georgia] Cable Television, 1977

Research Associate, Television and Political Socialization, National
Association of Broadcasters' funded project directed by J. R. Dominick,
1970-1971

University Committees and Service

Kent State University

University Graduate Faculty Council, since 1993
Commission on Research and Creative Activity Awards, 1995-1996
Promotion Advisory Board, 1993-1994, 1994-1995
University Research Council, 1992-1995 (Chair, 1994-1995)
Editorial Board Alternate, 1984-1985, 1988-1990, 1994
Human Subjects Review Board, 1985-1992

Kent State University, School of Communication Studies

Director of Graduate Studies, since 1992
Faculty Advisory Committee, since 1987
Faculty/Director Search Committees, since 1993 (Chair, 1993)
Graduate Faculty Committee, since 1986 (Chair, since 1992)
Graduate Studies Committee, 1983-1985, 1988, since 1990 (Chair,
since 1992)
Reappointment/Tenure/Promotion Committees, since 1987
Acting Director, Fall 1992, and periodically during Spring, Summer, and
Fall 1993, Summer and Fall 1994, and Summer 1995
Director, Communication Research Center, 1988-1992
Director's Review Committee, 1992
Challenge Grant Committee, 1991 (Chair)
Advisory Committee, Communication Research Center, 1983-1988
Faculty Search Committees, 1984-1985, 1987
Graduate Program Review Committee, 1986-1987
Committee on Computer Needs, Telecommunications Division, 1982
Curriculum Development Committees, Telecommunications Division, 1982

Kent State University, School of Journalism and Mass Communication

Faculty Advisory Committee, 1987-1991
Faculty Development Committee, 1988-1991 (Chair, 1988-1989, 1990)
Graduate Studies Committee, 1987-1991
Grants and External Funding Committee, 1988-1991 (Chair, 1989)
Library Committee, 1987-1988, 1989-1990
Grievance Committee, 1987-1989 (Chair, 1987-1988)
M.A. Program Review Committee, 1989
Chair Pro Tem, Director Search Committee, 1987
Curriculum Development Committees, 1987

Cleveland State University, Department of Communication

Building Planning Committee, 1981-1982
Curriculum Committee, 1981-1982
Faculty Search Committees, 1981-1982

University of Wisconsin-Parkside

Bookstore Committee, 1981
Faculty Advisor, Parkside *Ranger* student newspaper, 1978-1981
Faculty Senate Alternate, 1980-1981
Faculty Search Committees, Communication Discipline, 1978-1980
Faculty Senator, 1979-1980

Georgia Southern College

Broadcasting Coordinator, Dixie Speech Festival, 1976-1977

Awards and Recognition

Ranked Twentieth, Top-Ranked Active Scholars in Communication Studies,
Communication Education Article, July 1993

Ranked First, Telecommunications Research Productivity, *Journalism*
Quarterly Article, Winter 1991

Ranked Fifth, Most Productive Researchers in Mass Communication, *Journalism*
Quarterly Article, Summer 1988

Inductee, Phi Beta Delta, Honor Society for International Scholars, April
1992

Invited Scholar, College of Journalism and Communications, University of
Florida, April 1989

Invited Faculty, Speech Communication Association Doctoral Honors Seminar,
University of Georgia, Athens, March 1987, March 1989

Award, Outstanding Young Men of America, U.S. Jaycees, 1982

Top-Three Paper (with R. B. Rubin), Mass Communication Divisions, Southern
Communication Association and Central States Communication Association,
April 1993

Top-Ten Paper (with R. B. Rubin), Mass Communication Division,
International Communication Association, May 1989

Top-Two Paper (with E. M. Perse), Mass Communication Division, Speech
Communication Association, November 1988

Top-Three Paper (with E. M. Perse, M. Hahn, & D. S. Taylor), Communication Theory and Methodology Division, Association for Education in Journalism and Mass Communication, August 1987

Second-Place Paper (with E. M. Perse), Research Committee, Broadcast Education Association, March 1987

Top-Three Paper, Mass Communication Division, Speech Communication Association, November 1984

Top-Three Paper, Mass Communication Division, Speech Communication Association, November 1983

Top-Ten Paper (with R. B. Rubin), Mass Communication Division, International Communication Association, May 1982

Top Paper (with R. B. Rubin), Scholarly Papers Competition, Broadcast Education Association, April 1981

Top-Ten Paper, Mass Communication Division, International Communication Association, May 1981

Top-Three Paper (with R. B. Rubin), Mass Communication Division, Speech Communication Association, November 1981

Top-Three Paper (with R. B. Rubin). Mass Communication Division, Speech Communication Association, November 1979

Nominee, Distinguished Teaching Award, Kent State University, 1985, 1987

Nominee, Distinguished Teaching Award, University of Wisconsin-Parkside, 1981

Dissertation and Thesis Direction

Cameron B. Armstrong, M.A. Thesis, *Communication differences among callers and noncallers of talk radio*, 1987.

Joseph C. Conway, Ph.D. Dissertation, *The influence of psychological variables on television viewing motivation and program preference*, 1989.

Julianne Cortese, M.A. thesis, *A uses and gratifications analysis of television home shopping*, 1995.

Neal F. Hamilton, M.A. Thesis, *Religiosity and television use*, 1987.

Karen C. Hartley, Ph.D. Dissertation, *Socialization by way of symbolic interactionism and culture theory: A communication perspective*, 1993.

Gyeongho Hur, Ph.D. Dissertation, *The influence of generality and specificity of levels of abstraction on television viewers' uses and gratifications*, 1995.

JungKee Kim, Ph.D. Dissertation, *The role of audience activity as a facilitator and an inhibitor of television viewing effects*, 1992.

Wendy S. Mitchell, M.A. Thesis, *Affinity-seeking strategies used by politicians*, 1994.

Elizabeth M. Perse, M.A. Thesis, *Soap opera viewing by college students and the cultivation process*, 1985.

Elizabeth M. Perse, Ph.D. Dissertation, *Cognitive and affective involvement with local television news*, 1987.

Robert A. Powell, M.A. Thesis, *Television and interpersonal influences on the learning of sexual values among older adolescents*, 1985.

Donald S. Taylor, Ph.D. Dissertation, *Application of the uses and dependency model of mass communication to development communication in the western area of Sierra Leone*, 1991.

Debra L. Tess, M.A. Thesis, *Self-image and attraction to radio stations*, 1988.

Lyn M. Wolfson, M.A. Thesis, *An expectancy-value analysis of the gratifications sought and obtained from celebrity endorsers in advertisements*, 1993.

Professional Affiliations

Broadcast Education Association
Eastern Communication Association
International Communication Association
Speech Communication Association
World Communication Association

NAB Rebuttal
94-3

Rebuttal Testimony of John R. Woodbury

February 15, 1996

Qualifications and Conclusions

My name is John R. Woodbury and I am currently a Vice President at Charles River Associates, an economics consulting firm. I received my B.A. *summa cum laude* in Economics from the College of the Holy Cross in 1971 and my Ph.D. in Economics from Washington University (St. Louis) in 1977. Among other positions, I have served as a Brookings Economic Policy Fellow at the Civil Aeronautics Board (1978-79), a member of the Network Inquiry Special Staff at the Federal Communications Commission (1979-80), a Senior Staff Economist and Associate Director for Special Projects in the Federal Trade Commission's Bureau of Economics (1982-83, 1985-89), and Vice President of Research and Policy Analysis at the National Cable Television Association (1983-85). I began my career in private consulting in 1989 and joined Charles River Associates in 1992. My curriculum vita in Attachment A details my experience and qualifications.

During most of my career, I have been involved in the study of various aspects of telecommunications markets. While at the FCC's Network Inquiry, I was a co-author (with A. Richard Metzger) of a report that analyzed the economics of network program supply. For the Network Inquiry's Final Report, I was responsible for analyzing FCC regulations that govern the television broadcasting industry, including the effect of cable television on the policy bases for those regulations. At the Federal Trade Commission, I was responsible for drafting a number of FTC Comments filed with the FCC regarding the regulation of the cable industry. During my tenure at the National Cable Television Association, I served as the staff liaison

to NCTA's Copyright Committee, charged with overseeing initiatives before the Copyright Royalty Tribunal. In this capacity, I was responsible for analyzing the empirical basis for the 3.75 percent distant signal rate and for estimating the appropriate inflation adjustment for distant signal payments and presenting those findings to the various claimant groups. In addition, I was part of a small negotiating team that included NCTA's President and the Chairman of its Executive Committee and whose purpose was to determine whether an agreement could be reached with the Motion Picture Association of America (MPAA) on simplifying the copyright royalty payment scheme.

Since entering private consulting, I have been involved in a significant number of projects assessing markets in which cable television systems participate. I was the lead economist in a study that was submitted to the FCC evaluating the effects on consumers of rate deregulation following passage of the 1984 Cable Act. I co-authored a number of reports submitted to the FCC evaluating various aspects of cable television policy following the adoption of the 1992 Cable Act. These included an analysis of the economics principles that should guide rate reregulation, an evaluation of the empirical basis for the FCC's chosen method of rate regulation, and an analysis of the costs and benefits of vertical integration in the cable industry. The research detailed in my vita reflects my experience in analyzing the telecommunications industry.

In 1990, I testified as a rebuttal witness before the Copyright Royalty Tribunal on behalf of the MPAA. The purpose of that testimony was to evaluate

claims by the Commissioner of the National Basketball Association concerning the value that cable subscribers place on sports programming. I have also testified as an expert in a number of antitrust cases and was prepared to testify in a number of others before they were settled.

Counsel for MPAA has asked me to review the basis for certain conclusions in three reports: "A Comparison of Viewing Hours and Market Value Data for Cable Network Programming: 1990-1992" by Kagan Media Appraisals ("Kagan Report"); Testimony of Dr. Michael A. Salinger ("Salinger Testimony"); and "Testimony of Paul I. Bortz" ("Bortz Testimony"). The Kagan Report appears to conclude that program viewership is a poor proxy for program value, presumably value to the cable operator. The Bortz Testimony offers the Panel a proposed distribution of royalties based upon responses by cable operators to a survey ("Bortz survey") asking how they would allocate a hypothetical distant signal budget among various programming types. In my analysis of the Bortz testimony, I have assumed that the programming types used in the Bortz Testimony roughly correspond to the programming categories represented by the various claimant groups. The Salinger Testimony claims that the responses to the Bortz survey provide economically meaningful estimates of the marketplace values of various distant signal programming types.

Summary of Conclusions

I have concluded that an analysis of the data used in the Kagan Report reveals, contrary to the claim in the Report, a very strong relationship between

viewership and "value," as defined in the Kagan Report. With respect to the Salinger Testimony, I conclude that there is no basis for believing that the responses to the Bortz survey are economically meaningful. Consequently, there is no basis for concluding that the responses can serve as a reasonable estimate of the relative value that cable operators place on various programming types. With respect to the Bortz Testimony, I have concluded that the responses provided by cable operators regarding the budget allocation for the various programming types in fact bear little or no relationship to the respondent operators' actual distant-signal programming choices. As a result, the Panel should not rely on the estimated share distributions in the Bortz Testimony as a benchmark for the royalty allocations because they do not correspond to what operators actually offer their subscribers. I discuss the basis for these conclusions below.

Review of the Kagan Report

The Kagan Report provides a number of comparisons between viewership of cable programming services and the "value" of those services as measured by (1) the production expenses of the programs appearing on those services and (2) the affiliate fees paid by cable operators to carry the services. Specifically, the Kagan Report asserts that it "looked at the correlation between viewing shares and the expenses that the Cable Networks incurred in obtaining and producing the programming that they delivered."¹ The Kagan Report concludes that "ESPN paid more of its revenue on acquiring and purchasing programming than it would had the only determinant of value been viewing hours. At the same time, Networks such as USA and Nickelodeon spent less than would be expected based solely on each Network's proportionate share of total viewing."²

In fact, the Kagan Report never "looked at the correlation" between viewership and "value" as defined in the Report. That is, the Kagan Report never offered the CARP any statistical analysis of the relationship between viewership and "value," as suggested by the term "correlation." Instead, the Report compares each network's share of "value" with the viewing share of each network, calculated as a percentage of the total viewing of all the cable networks studied. From this, the Report simply concludes that viewing hours are not a good proxy for "value" because the share of viewing hours does not always match the share of "value"

¹ P.19.

² P.24.

accounted for by each of the various cable networks, i.e., the ratio of "value" share to viewing share is not always one-to-one.

The ratio-comparison approach adopted in the Kagan Report does not measure the correlation between viewing and "value" shares. Using the data provided in the Kagan Report and adopting the premises and definitions of that Report, I used regression analysis to estimate the relationship between viewership shares and the two alternative definitions of "value" shares used in the Kagan Report. The relationships between viewership shares and "value" as measured by the share of program production expenses are depicted in Figures 1-3 for each year, 1990-92.³ All three figures indicate a strong, positive relationship between "value" and viewership shares. Indeed, there is an approximately one-to-one relationship between the "value" shares and the viewership shares.

The analysis for 1990 indicates that a 10 percentage point increase in the viewership share of a cable program service is associated with a 9.8 percentage point increase in the share of program production expenditures accounted for by that service, that is, the ratio of "value" to viewership is one to .98. For the relationship estimated for 1991, the comparable ratio is one to .83. For the relationship estimated for 1992, the ratio is one to 1.05. For the entire 1990-92 period, the estimated ratio is one to .94. Thus, in contrast to the conclusion of no correlation asserted in the Kagan report, the viewership share of a program service

³ All figures and tables can be found in Attachment B. The viewership and "value" shares are measured as percentages, i.e., values that range between zero and 100.

provides a very close approximation of its "value" share (as defined in the Kagan Report) of each cable network.

Table 1 reports the underlying statistics for Figures 1-3. Some explanation of the purpose of statistical analysis may be helpful in interpreting this Table. A regression analysis will mechanically estimate some numerical value for the relationship between any two factors, even if there is no "true" relationship between the factors. For example, if one used regression analysis to assess the relationship between (say) the height of men and the average temperature on the day each was born, the regression would mechanically estimate a positive or negative relationship, even if no such relationship exists.⁴ This result would occur because there is some set of chance events that produce a numerical relationship between the two factors, but the relationship is spurious. If one could eliminate the effect of the "chance" events, the regression would estimate a value of zero for the height-temperature relationship, which is what we should expect the "true" value to be.

Because chance events cannot be eliminated from nature and human behavior, it is necessary to find a way of distinguishing spurious relationships--ones that arise solely from chance events--from "true" relationships. Statistical analysis permits one to do so precisely. One useful statistic in this regard is the P-value. The P-value indicates the probability that the estimated regression result would have occurred if in fact there were no true relationship between two factors, i.e., if the "true" numerical relationship between the factors is zero. For example, a

⁴ This statement would be incorrect only if (in this example) the height of all men were the same or if the temperature on each birthday were the same.

P-value of .95 for an estimated numerical relationship means that there is a 95 percent chance of observing the estimated result if in fact the "true" numerical relationship is zero.⁵ With a P-value of .95, one can be quite certain that the measured relationship is a "chance" event. Lower P-values would indicate a reduced probability of observing the estimated relationship if in fact there were no "true" relationship between the factors. Economists would typically conclude that the estimated relationship results from chance events unless the P-value is .05 or less. At that P-value, an economist would conclude that the observed relationship is highly unlikely to have occurred as a result of chance alone, i.e., the probability of such an occurrence is 5 percent or less. In such cases, the economist would refer to such a relationship as statistically significant.

It is important to note that the statistical significance of a relationship in a regression analysis is not the same as its numerical importance. In the height-temperature example, the numerical size of the relationship may be quite substantial. However, its lack of statistical significance indicates that the numerical size most likely arose by chance. By contrast, a relationship may be statistically significant, indicating that it is unlikely to have arisen by chance, but be numerically quite small.

An alternative that is equivalent to the P-value in distinguishing between chance and "true" relationships is the 95 percent (or higher) confidence interval around the numerical value of the relationship. The interval can be thought of as a

⁵ An alternative--and less verbose--way of describing this result is to state that the estimated numerical relationship is not significantly different from zero.

statistical "margin of error" associated with the estimated numerical value. For example, if one were to estimate the relationship between height and temperature for a large number of samples of men, the "true" value of the relationship will be found within the interval 95 percent of the time. For the height-temperature example, where one knows there is no "true" relationship, one would expect the 95 percent confidence interval to include positive values, negative values, and zero. Roughly speaking, such an interval indicates that chance events could produce almost any relationship between height and temperature, exactly what one would expect if there were no "true" relationship between the two factors.⁶

Against that background, Table 1 reports the P-values and confidence intervals for each of the single-year regressions. As is apparent from the Table, the highest P-value is only about .01 for 1991, with the estimated relationships in other years having even lower P-values. These low P-values indicate that chance events are unlikely to be generating the observed numerical relationships. In statistical terms, if there were no "true" relationship between "value" and viewership shares, the estimated relationship in each year could have occurred with only a 1 percent probability or less. Thus, one can be quite certain that the estimated relationships for each year are not the result of "chance" events.

On the other hand, the 95 percent confidence intervals for each of the three years are relatively wide, a result that may appear puzzling because the regression

⁶ Of course, even if there is (say) a "true" positive relationship between two factors, the estimated numerical value will also be affected by chance events. In this case, if the estimated value is statistically significant, all the values in the confidence interval will be positive (i.e., non-zero and non-negative), but the size of the confidence interval will be determined by chance events.

estimates of the relationship are quite similar for the three years. The span of these confidence intervals is likely due to the small number of observations for each year. When a regression is used to estimate a single relationship for all three years, the estimated confidence interval narrows considerably, as reported in the column labeled 1990-92 in Table 1. Note that none of the intervals contains zero or any negative numbers, a result consistent with the conclusion that the estimated positive relationship between "value" shares and viewership shares is unlikely to be the result of chance events.

The narrow range of results among the three years individually, and the results for all three years combined, highlights the strong relationship present between "value" and viewership shares. In addition, the consistency of the magnitude of all of the estimated numerical relationships around one is itself noteworthy. Given the nearly one-to-one relationship, it appears that a cable service's viewership share is a very good surrogate for its "value" share, defined in this case as its share of program production costs.

These results are confirmed by an analysis using the Kagan Report's alternative definition of "value," the share of affiliate fees accounted for by each of the cable networks in the Report. The results for each of the years are depicted in Figures 4-6, with the statistical detail reported in Table 2. As is apparent from the Figures and the Table, the relationship between affiliate fees shares and viewership shares is very similar to that between program expenses and viewership shares.

The relationship is always positive and very nearly one-to-one, and is always highly significant in a statistical sense.

In summary, the conclusion in the Kagan Report that there is no correspondence between "value" and viewership shares is without statistical support. A statistical analysis of the data in the Kagan Report indicates that there is a very strong positive relationship between "value" and viewership shares. Indeed, every one percentage point increase in the viewership share is associated with (approximately) a one percentage point increase in the "value" share. This means that viewership shares provide a very good approximation of the "value" shares of the different cable networks (as defined in the Kagan Report).

Review of the Salinger Testimony

A fundamental premise in economics is that the marketplace value of a product is the marginal value of that product (i.e., the increase in value when an additional unit is consumed) times the amount of the product that is purchased.⁷ For that reason, the relative marketplace values of different products may differ substantially from their relative total values.⁸ The distinction between these two types of values is related to what has often been referred to as the "diamond-water paradox." Consider a consumer who purchases (among other things) both water and diamonds. Although the fact that water is indispensable to life means that it has a high total value, its marketplace value (price times quantity) will generally be

⁷ Put differently, marketplace prices reflect marginal values.

⁸ All economists generally agree on this analytical point.

much lower than that for diamonds. The fact that water is plentiful means that its marginal value, and hence its market price, is very low. However, because diamonds are not biologically indispensable for the consumer, they will have a lower total value than water even though their marketplace value may be much higher. Diamonds are relatively scarce and this scarcity will lead to a high market price and a high marketplace value for diamonds. As this example illustrates, there need not be any relationship between the relative marketplace values of different goods or services and their total value. One economics text made a similar point with respect to air:

the "total economic [marketplace] value" or revenue of a good (price x quantity) differs from the measurement necessary to record "total welfare." The total economic [marketplace] value of air is zero; its contribution to welfare [total value], very great. [Note omitted.]⁹

I understand that in earlier surveys, Mr. Bortz asked cable operators for information about the relative "values" they place on the various types of programs on the distant signals they carry. The use of that question was criticized, however, because it failed to distinguish between the total value to the operator of programs of a particular type and the marketplace values of programs of that type.¹⁰ The Salinger Testimony offers two types of responses to this criticism.

⁹ Paul A. Samuelson, *Economics* (New York: McGraw-Hill, Inc., 1973), p.436.

¹⁰ The question asked in the most recent Bortz surveys focuses on the distribution of a hypothetical program budget. This change is apparently in part in response to the earlier criticism. Nonetheless, the relevant question in the most recent survey (question 4a in Appendix C to the Bortz Testimony) begins by asking the respondent "to estimate the relative value" of distant signal programming.

Dr. Salinger's first response is that relative total values and relative marketplace values are the same across program types, so that even if cable operators responded to the Bortz survey in terms of total values, their responses provide information about relative marketplace values.¹¹ However, the Salinger Testimony provides no evidence in support of the proposition that total value bears the same relationship to marketplace value for all programs. Indeed, there is no reason to believe that such a relationship would generally be found. As the "diamond-water paradox" indicates, economists do not generally assume that total and marketplace values are exactly proportional across different products. The total value of water to the consumer will be substantially larger than the total value of diamonds purchased by the consumer, whereas the marketplace value of water is likely to be substantially less than the marketplace value of diamonds to that consumer.

The second response provided by Dr. Salinger is that the Bortz survey somehow actually measures marketplace value. In particular, the Salinger Testimony argues that "the Bortz survey offers insight into the behavior of the cable operators -- the entities making the decisions on which distant signal programming will be offered and paying the copyright royalty fees."¹² Dr. Salinger notes that "The

¹¹ Salinger Testimony, pp. 8-9.

¹² Id., p. 6. Dr. Salinger notes that he did not address "purely technical issues associated with the Bortz study such as whether the stratification was appropriate and so on. Rather, I simply addressed the conceptual question of the relative values of the viewership ratings and the answer to question 4 in the Bortz study to allocate the copyright royalties." (footnote 4, p. 3.) In his written testimony, Dr. Salinger does not address the issue of whether the answers to hypothetical questions such as those posed in the Bortz survey are to be preferred to observations of actual operator behavior. In his oral testimony, Dr. Salinger states that his preferred approach would be to measure purchase decisions related to programming choices on cable networks. See transcript, pp. 6695-6696. This approach

following question is most relevant for solving the problem that the CARP faces in this case. 'What prices of different types of programs would induce a cable system to purchase the program mix that it actually showed?'"¹³

Of course, the Bortz survey does not actually ask Dr. Salinger's "most relevant" question. What the survey asked instead was: "Assume you have a fixed dollar amount to spend on the non-network programming carried on these stations; in other words, a programming budget. Please think in terms of what percentage, if any, of the fixed dollar amount you would spend for each type of programming...."¹⁴

Dr. Salinger argues that the Bortz survey did not ask the "most relevant" question because such a question "undoubtedly sounds, odd, confusing, and difficult to answer to most people without [formal training in economics.]"¹⁵ The Salinger Testimony goes on to claim that "Given that the quantities [of programs] are fixed...the budget shares imply the prices. I believe that question 4 in the Bortz survey was a reasonable way to ask for the prices that would have induced cable operators to purchase the programming they carry in a way that would make sense to the respondents."¹⁶

The first point to make in response to this claim is that Dr. Salinger's assertion strains credulity. It is difficult to believe that although the "right" question was not asked, operators responded to the "wrong" question in the same way that

would require analysis of actual behavior, not responses to hypothetical questions. Indeed, Dr. Salinger expresses the view that an analysis based on actual behavior is to be preferred to one based on survey responses. See transcript, p. 6698.

¹³ Id., p. 7, emphasis added.

¹⁴ Bortz Testimony, Appendix C, question 4a.

¹⁵ Id.

¹⁶ Id., pp. 7-8.

they would have responded to the "right" question because they intuitively knew what question the Bortz survey should have been asking.

Second, the claim in the Salinger Testimony that the "fixed budget" share responses in the Bortz survey are sufficient to determine marginal values is, as a general matter, incorrect. In the present context, if one knew the amount that a cable operator actually spent on the various types of distant signal programs, and the amounts of each of the various types of programming on those signals, one could use those data to infer what the implicit prices for those program types must have been for the cable system to have incurred the actual expenditures. That is, the amounts of programming on the distant signals are those that would be purchased by the cable operator if these implicit prices were the actual prices and the operator's "budget" for purchasing distant signal programming were equal to the amounts of the various types of programming on the distant signals it actually carried multiplied by these prices.

However, by framing the question in terms of a "fixed budget" instead of the operator's actual distant signal expenditures, the question placed respondents in a hypothetical market context that is at variance with the way operators actually make market decisions. In reality, cable operators do not specify a fixed budget amount they have to spend on distant signal program types. Rather, the amount they spend results from a process in which they add additional distant signal programming so long as the additional net revenues they obtain from doing so

exceed the additional copyright royalty payments they must make when they add the signals.

The resulting "budget" can be small or large depending on whether a small or large number of additional signals are carried and, in any event, it is determined as part of the process in which cable operators determine how many and which distant signals to carry. It simply makes no economic sense for them to think about how to allocate a fixed budget because that does not describe how cable operators in fact make their distant signal carriage decisions.¹⁷ Thus, contrary to Dr. Salinger's claim, one cannot infer from a hypothetical "fixed budget" response the implicit prices operators actually considered in choosing the actual level of distant signal programming expenditures.

Finally, Mr. Bortz now agrees that the hypothetical market context in which the budget share question was asked is flawed in yet another way.¹⁸ Specifically, the survey asked operators to value the distant signal programming "in terms of attracting and retaining subscribers." This cannot be the way in which operators value distant signals; if it were, a cable operator could achieve this objective by charging a zero price for its services.

¹⁷ Note that the Bortz survey asks how the operator would distribute a fixed dollar amount, which is not the same as the amount they actually spent to carry distant signals. Indeed, in his oral testimony, Mr. Bortz explicitly indicated that he did not intend to ask cable operators how they would allocate the amount they actually spent to carry distant signals. See transcript, p. 805. Thus, there is no reason to believe that cable operators interpreted the Bortz questions as asking how they would allocate the amount they actually spent on distant signals.

¹⁸ See transcript, pp. 708-709.

The operator is interested in maximizing profits from distant signal carriage, which Dr. Salinger agrees is the "value" to operators from distant signal carriage.¹⁹ The operator is not interested in simply "attracting and retaining subscribers." Most obviously, the addition of a distant signal may be profitable even if there is no change, or even a decrease, in subscribership. This could occur, for example, if the distant signal addition permits the operator to raise basic rates. Thus, if some types of distant signal programming permitted operators to raise rates more than other types even in the absence of subscriber effects, the failure to account for this source of profit (the value of distant signal programming to the operator) will bias the "budget" shares.

There are other ways by which the Bortz survey's failure to specify, in terms familiar to the operator, the meaning of retaining or attracting subscribers may have resulted in flawed responses. For example, the operator may have interpreted the question only in terms of the distant-signal effect on basic revenues (at an unchanged basic price). If so, then other sources of operator value from distant signal programming would have been excluded. Specifically, the carriage of distant signal programming might increase advertising revenues or pay service revenues (and profits) above what they would otherwise have been. If the kinds of distant-signal programs that increase basic revenues are different from those that increase advertising and pay revenues, there is no reason to believe that responses of the

¹⁹ See transcript, p.6802.

operators reflect the responses they would have provided if they had been instructed specifically to consider these additional sources of revenues.

In conclusion, the Salinger Testimony can be seen simply as an ex post attempt to legitimize the Bortz survey by attempting to provide an interpretation of what question the Bortz survey should have asked to be consistent with sound economic analysis. By Dr. Salinger's own admission, however, the Bortz survey did not ask the "most relevant" question. Moreover, the interpretation that the Salinger Testimony gives to the question that the Bortz survey asked is inconsistent with the way that cable operators actually make decisions as to how many and which distant signals to carry.

In the end, Dr. Salinger's defense of the Bortz survey provides another reason why one should not take responses to hypothetical questions posed to cable operators as reliable evidence about how they actually behave. It is highly unlikely that cable operators interpreted the Bortz valuation question in the way that Dr. Salinger, or any other economist, would have liked it to be interpreted. There is no way of being certain of exactly how cable operators interpreted the question or whether they all interpreted the question in the same way. Consequently, the CARP cannot at all be certain that a uniform or a consistent measure of value was assigned by all operators to the various programming types. Thus, on conceptual grounds alone, the CARP should place little or no weight on the answers to these questions and should accord primary weight in its allocation decisions to studies based on actual behavior.

Review of the Bortz Testimony

I understand that one recurring methodological issue before the CARP has been the "reliability" of the survey responses of cable operators as reported in the Bortz Testimony. By "reliability" I mean the extent to which operator responses to the Bortz survey correspond to the actual marketplace behavior of cable operators. Some witnesses, such as Mr. Bortz and Dr. Salinger, have advised the CARP that operator responses to hypothetical questions regarding the allocation of fixed distant-signal program budgets among various programming types offers an accurate assessment of how operators value programming.

Earlier in this proceeding, Dr. Besen explained that there were substantial a priori reasons for doubting the reliability of the Bortz study. Perhaps the most important is that surveys asking respondents how much they would be willing to pay for various goods or services are suspect because respondents are not required to pay these amounts. My discussion of the Salinger Testimony should give rise to further doubts. Nonetheless, Mr. Bortz and others have claimed that his approach provides a reasonable estimate of cable operator behavior in the real-world market place.

To examine this premise directly, and thus to determine the extent to which the Bortz survey results correspond to actual cable operator behavior, I used regression analysis to estimate the extent to which the operators' answers to the relative value question posed in the Bortz survey corresponded to their actual

choices of distant signal programming. The Bortz survey results are suspect if there is little correspondence between the respondents' hypothetical budgetary choices and the distant signal programming mix they actually selected.

If the hypothetical budgetary shares actually measured the relative value that operators place on the various programming categories, one might reasonably expect that operators that tend to value one program category substantially more than other operators would choose a distant signal programming mix that contains a greater share of the programming they value more highly. For example, operators that say they place a substantially higher value on distant-signal sports should actually choose to carry distant signals that contain a substantially higher share of sports programming than the share carried by those operators that say they place a lower value on distant signal sports programs.

If the survey results reported in the Bortz Testimony were consistent with actual behavior, one would expect that the hypothetical budget allocations would bear a numerically large relationship to the kinds of distant signal programming actually carried by cable operators. Put somewhat differently, the data provided in the Bortz survey should permit the CARP to "calibrate" the survey responses to the actual behavior of the respondents.

I used data provided by Mr. Bortz during discovery to identify the reported budget shares for each program type as reported by the responding cable operator and the distant signals carried by that operator during the relevant year (1990, 1991 and 1992). Using the programming information provided to Dr. Besen by the

Motion Picture Association of America regarding the hours of programming by programming type on those distant signals, I calculated for each respondent the share of total distant-signal programming hours accounted for by each of the programming categories (sports, movies and series, devotional, "local," and (for 1992) PBS programs) on the distant signals carried by the respondent.²⁰ I also calculated these shares with distant-signal programming hours weighted by viewing.

Using regression analysis, I determined how closely the hypothetical budget share assigned by a cable system for each programming type is associated with the hours share of programming for that type on the distant signals actually carried.²¹ For 1990 and 1991, regressions were run for each of four program categories -- movies and series, sports, devotional, and "local" programs. For 1992, five regressions were run because of the availability of distant signal PBS programming data for that year in the data provided Dr. Besen. In addition, regressions that combined all observations for 1990-92 were estimated for local, devotional, sports, and movies and series programming.

Each of these regressions assessed the relationship between the hypothetical budget share allocation for one type of programming reported by an operator and the actual share of distant signal programming hours accounted for by

²⁰ Not all survey responses were used in the analysis. Some respondents apparently were recorded as allocating more than 100 percent of the hypothetical budget among distant signal program types and others were recorded as allocating less than 100 percent. These observations were discarded. In addition, some respondents were reported as carrying distant signals for which MPAA did not have programming data. These observations were also excluded from the analysis.

²¹ In this analysis, the budget shares and the programming shares are values that range between zero and one. The results for the viewer-weighted hours are reported below.

that type of programming actually carried in a particular year.²² If the hypothetical budget shares reflect actual values, one should expect to detect a large and statistically significant relationship between the two variables.

The results of this analysis are reported in Table 3. Only three of the 13 estimated individual-year relationships are statistically different from zero at conventional levels of statistical significance (P-values of .05 or less).²³ Thus, these estimated relationships are very likely to be the result of chance events rather than reflecting a "true" relationship between hypothetical budgetary shares and actual distant signal programming choices by operator respondents. Based on the individual-year regressions, one can conclude that there is no relationship between how operators say they would allocate a distant signal programming budget and the programming choices they actually made.²⁴

²² Recall that the Bortz program types do not precisely match the Phase I category definitions. Despite the differences, I assumed that the Bortz program types and the Nielsen categories were equivalent.

²³ One of the relationships is negative (for sports in 1990), implying that cable operators who valued distant-signal sports programs more than other operators tended to carry fewer distant-signal sports programs.

²⁴ Significant relationships are found for devotional programming in 1991 and for PBS and movies and series programming for 1992. However, the quantitative importance of these relationships is quite small for devotional and movies and series programming. For example, consider an operator whose reported hypothetical budget share allocation for devotional programming is 10 percentage points higher than that for another operator. The operator with the larger allocation carries only one-half of a percentage point more in distant-signal programming hours accounted for by devotional programming than the operator with the smaller budget allocation. Similarly, an operator with a reported budget allocation for movies and series programming that is 10 percentage points greater than that of another operator carries a share of distant-signal movies and series programming that is only 1.5 percentage points higher than the operator with the lower budgetary allocation. Only for PBS is the relationship quantitatively important: An operator with a budget allocation for PBS programming that is 10 percentage points greater than that of another operator carries a share of distant-signal PBS programming that is about 10 percentage points higher than the operator with the smaller budgetary allocation. However, it appears that this relationship is a result of many respondents who assign a value of zero to PBS programming and carry no such programming. When these observations are excluded from the regression, the relationship between the PBS budget share and the PBS programming share becomes statistically insignificant.

Regressions using all observations for 1990-92 were also estimated (see Table 3).²⁵ Two out of four of the estimated regressions display a statistically significant relationship between the hypothetical budget share and the corresponding distant-signal programming share, and one relationship (that for local programming) is just shy of statistical significance. There is no statistically significant relationship between the hypothetical budget share for distant-signal sports programming and the share of distant signal programming accounted for by sports. Thus, for distant-signal sports programming in particular, there is only a chance correspondence between how much operators said they would allocate to distant signal sports programming and the amount of sports programming they actually carried.

For the three 1990-92 relationships that are statistically significant (or very nearly so), the correspondence between the budget shares for each programming category and the distant-signal programming share for that category is numerically quite small. To illustrate the extent of the correspondence, Table 4 uses the results in Table 3 to compare the program selection patterns of two hypothetical systems that differ by 20 percentage points in their budget share allocation to each distant-signal program type. (Table 4 includes the estimate for sports programming, although the estimated relationship for sports programming is highly likely to have occurred by chance.) Each of these differences is based on the upper bound of the 95 percent confidence interval for the estimated numerical relationship, rather than

²⁵ These regressions include factors ("dummy variables") to account for differences in the mean share of programming of the particular category that was carried in each year.

the estimates in Table 3. That is, it is based on the numerical estimate in Table 3 plus the associated "margin of error." In this sense, the differences between the two hypothetical systems are biased towards a larger correspondence between budget share responses and distant signal programming choices.

As reported in Table 4, a 20 percentage point difference between two operators in the hypothetical budget allocation for local programming is associated with only a 1.5 percentage point difference between the two operators in the distant-signal local programming share. Similarly, a 20 percentage point difference between two operators in the budget share of distant signal devotional programming corresponds to only a 2.1 percentage point difference in the actual share of distant signal programming accounted for by devotional programming. The corresponding percentage point difference for movies and series is about the same as that for devotional programming. The comparable difference for sports programming is virtually zero, which is consistent with the statistical results reported in Table 3. A 20 percentage point difference between two operators in the hypothetical budget allocation for sports programming is associated with virtually no difference between the two operators in the sports programming share.

Thus, while, for the 1990-92 regressions, there are statistically significant relationships between operator responses to the hypothetical budget allocation question and the distant-signal programming actually carried, the correspondence between the two is quantitatively quite small. Substantial differences among systems in their survey responses are associated with only trivial differences in their

distant signal programming mix. How operators say they value distant signal program types is at considerable variance with their actual carriage decisions.

In summary, the paucity of statistically significant relationships between the hypothetical distant-signal programming budget shares of operators and their distant-signal program choices in the individual year regressions casts great doubt on the reliability of the Bortz survey as a guide to the real-world marketplace behavior of cable operators. The statistically significant but numerically weak results for two of the four programming categories for the combined 1990-92 regressions suggest that, at best, the correspondence between operator responses to the hypothetical budget question and the operator's mix of distant signal programming is quantitatively small. Finally, there is never any statistically significant relationship between the budget allocation response for sports programming and the actual amount of sports programming carried.

It is possible, of course, that the use of programming hours alone to define the distant-signal programming mix is inappropriate. For example, an operator is unlikely to value programs that are aired at 3 A.M. as much as programs that are aired at 8 P.M. Further, within any given programming category, some programs may be more attractive to the operator because they attract more viewing. To account for these possible differences among programming hours, I used Dr. Besen's data that adjusted the "raw" programming hours for each category for viewership, thereby rendering different kinds of programs within and across

categories more homogeneous. I then conducted an analysis using adjusted rather than actual programming hours.²⁶

The results are reported in Table 5. Only four out of the twelve individual year relationships are statistically significant: those for local programming in 1990 and for local, sports, and movies and series in 1992. But, as was the case with the use of actual hours, the numerical importance of these four relationships is quite small.²⁷

Similar to the case with actual programming hours, the regressions that combine all of the 1990-92 observations result in two statistically significant relationships between the hypothetical budget shares and the mix of distant signal programming carried. The relationship for sports is not statistically significant.

Once again, the numerical relationships between the hypothetical budget shares and the programming shares of the various program types are very small for the 1990-92 regressions, even when the relationships are statistically significant. Table 6 is based on the same approach as that in Table 4, one that is biased towards finding a correspondence between what operators say they do and what they actually do. As is apparent from the Table, a 20 percentage point difference between two systems in the share allocated to any of the four program types is

²⁶ Because PBS programs are not divided among smaller programming categories, there is no adjustment for PBS programs and therefore no adjusted-hours regression to report.

²⁷ For example, an operator with a budget allocation for sports programming that is 10 percentage points greater than that of another operator carries a share of distant-signal sports programming that is only about one-half of one percentage point greater than the operator with the smaller budgetary allocation. Similarly, an operator with a budget allocation for movies and series programming that is 10 percentage points greater than that of another operator carries a share of distant-signal movies and series programming that is about one and one-half percentage points higher than the operator with the smaller budgetary allocation.

associated with only very small differences between the shares of each programming type carried by the operator.

In summary, the use of adjusted hours does not improve the relationship between the hypothetical budget allocations of cable operators and their choice of distant signal programming. Most of the individual-year relationships are not statistically significant. While two of the four relationships are statistically significant when the data for all years are combined, all four display only a very small correspondence between the operators' responses to the hypothetical budget allocations and their choices of distant signal programming.

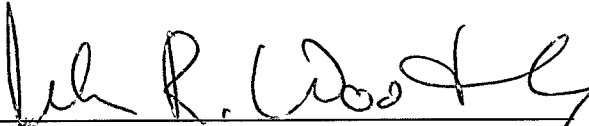
Summary

There is no empirical basis for the conclusion in the Kagan Report that distant-signal program "value" and viewership are unrelated factors. My statistical analysis of the data indicates that there is an approximately one-to-one relationship between viewership shares and "value" shares. Thus, viewership is a good surrogate for "value" as that term is defined in the Kagan Report.

In addition, Dr. Salinger's defense of the "relative value" question asked in the Bortz survey is strained. The "right" question was not asked and there is no reason to believe that respondent operators nonetheless gave the right answers to the wrong question. Further, the hypothetical market circumstances in which the respondent was instructed to calculate the "fixed budget shares" do not correspond to the way in which cable operators actually make distant signal carriage choices.

Finally, my analysis of the actual behavior of the survey respondents in the Bortz Testimony indicates that there is little or no relationship between what cable operators said about what they would do and what they actually did. Specifically, differences in cable operators' responses to the hypothetical allocation of budget shares to the various program types display little or no relationship to the distant signal programming they actually chose. Because of the lack of correspondence between the survey responses and the behavior of the respondents, the CARP should place little or no weight on the royalty distribution proposed in the Bortz Testimony.

I declare under penalty of perjury that the foregoing is true and correct to the best of my knowledge and belief.



John R. Woodbury
February 15, 1996

Attachment A

JOHN R. WOODBURY — Vice President

Ph.D. Economics, Washington University (St. Louis)
M.A. Economics, Washington University (St. Louis)
B.A. Economics, College of the Holy Cross, *summa cum laude*

Dr. Woodbury's principal fields of expertise are industrial organization, regulation, antitrust, law, and economics. He is an expert in and has published on the economics of antitrust and regulation in broadcasting, cable, telecommunications, and other industries.

PRIOR PROFESSIONAL EXPERIENCE

Microeconomic Consulting and Research Associates, Inc. (formerly Competitive Analysis Group, ICF Consulting Associates)

Principal, 1989–1992. Responsible for providing antitrust and regulatory advice to clients.

Analysis Group

Research Associate, 1989. Responsible for providing antitrust and regulatory advice to clients.

Federal Trade Commission (1985–1989)

Associate Director for Special Projects, Office of the Bureau Director, Bureau of Economics. Responsible for: initiating, conducting, and reviewing economic studies on Commission and other regulatory policies (including telecommunications); drafting speeches for the Chairman; and reviewing Bureau participation in FTC cases.

Assistant Director for Rulemaking, Division of Policy and Evaluation, Bureau of Consumer Protection. Responsible for managing the Commission's Rulemaking Agenda, and drafting recommendations to the Commission from the Bureau Director. Rules reviewed include Holder-in-Due-Course, Vocational Schools, Cooling-Off, and Funeral Rules.

Deputy Assistant Director, Regulatory Analysis, Bureau of Economics. Responsible for conducting or supervising studies or filings before regulatory agencies, including the Federal Communications Commission, the International Trade Commission, and the National Highway Traffic Safety Administration.

National Cable Television Association

Vice President, Department of Research and Policy Analysis, 1983–1985. Responsible for conduct or supervision of studies related to cable television, including consumer costs of the



JOHN R. WOODBURY — Page 2

franchising process, deregulation of cable prices, effects of copyright fees on consumers, and the extent of competition with cable TV.

Federal Trade Commission

Senior Economist, Regulatory Analysis Division, Bureau of Economics, 1982–1983. Responsible for broadcasting and telecommunications.

Federal Communications Commission (1979–1982)

Chief, Economics Division, Common Carrier Bureau. Senior economic advisor to Bureau and Commission on common carrier policy. Directed 25 subordinates in policy analysis.

Industry Economist, Network Inquiry Special Staff. Responsible for the analysis of the program supply industry and the competitive impact of new broadcast technology.

Civil Aeronautics Board

Brookings Economic Policy Fellow assigned to Office of Economic Analysis, 1978–1979. Responsible for the development of merger policy, international aviation policy, and service to small communities. Position: Assistant Chief, Policy Analysis Division.

State University of New York at Albany

Assistant Professor of Economics, 1977–1978.

Federal Reserve Bank of New York at Albany

Economist, International Research Department, 1975–1977. Responsible for assessing bank-reported capital flows and exchange-rate movements.

Southern Illinois University

Lecturer, 1974–1975.

EXPERT WITNESS ACTIVITIES

Expert Witness before the Copyright Royalty Tribunal, Rebuttal Testimony on the Value of Distant Signal Sports Programming. Prepared on behalf of the Motion Picture Association of America, December 1991.

Expert Witness preparation in five antitrust investigations, 1988–1992, on behalf of the FTC.



JOHN R. WOODBURY — Page 3

Expert Witness, FTC vs. Elders Grain, Preliminary Injunction Proceeding, Sixth District Court. Testimony prepared on behalf of the FTC, June 1988.

Expert Witness before the International Trade Commission and Department of Commerce, Imports of Japanese Semiconductors. Testimony prepared on behalf of the FTC, 1986.

Expert Witness, Texas International/National/Pan American Acquisition Case and Continental/Western Acquisition Case. Testimony prepared on behalf of the Civil Aeronautics Board, 1978–1979.

OTHER SELECTED CONSULTING ACTIVITIES

Assisted in the preparation of testimony for the D.C. District Court regarding the competitive effects of the “must-carry” rules imposed on cable systems, 1996.

Submitted a report, “A Competitive Markup Approach to Establishing Rates When Adding Cable Program Services” (With Stanley M. Besen) to the Federal Communications Commission on behalf of Tele-Communications, Inc., 1994.

Submitted a report, “Exclusivity and Differential Pricing for Cable Program Services” (with Stanley M. Besen and Steven R. Brenner) to the Federal Communications Commission on behalf of Tele-Communications, Inc., 1993.

Submitted a report, “An Analysis of Cable Television Rate Regulation” (with Stanley M. Besen and Steven R. Brenner) to the Federal Communications Commission on behalf of Tele-Communications, Inc., 1993

Evaluated the prospects for Direct Broadcast Satellites on behalf of a potential investor, 1992.

Assisted in the preparation of testimony on the value of distant signal programming to earth station owners on behalf of the Motion Picture Association of America, 1992.

Prepared estimates of the supply elasticity of crude oil production and a paper (with F.R. Warren-Boulton and K. Baseman) on the alternatives to traditional pipeline regulation for a pipeline client, 1991–1992.

Prepared analyses of liability and damage estimates (with F.R. Warren-Boulton) on behalf of NEC in a bid-rigging allegation and presented those analyses to Justice Department officials, 1991.

Prepared a report, “Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule” (with F.R. Warren-Boulton) on behalf of the Motion Picture Association of America, 1990.



JOHN R. WOODBURY — Page 4

Submitted a report, "The Effect of Rate Deregulation on Cable Subscribers," to the Federal Communications Commission on behalf of the National Cable Television Association, 1990.

Submitted an affidavit, "Economic Implications of the Pac Tel/Chicago Waiver Request" to the Department of Justice on behalf of the National Cable Television Association, January 1990.

Submitted an analysis of sham litigation allegations to the Justice Department on behalf of a software client, 1989.

PUBLICATIONS

"Telecommunications in the U.S.: Evolution to Pluralism." With Stanley M. Besen and Steven R. Brenner. In *ISDN in the U.S.A., Japan, Singapore and Europe*, edited by B. Lange (forthcoming).

"Market Structure, Program Diversity, and Radio Audience Size." With Robert P. Rogers. *Contemporary Economic Policy* (1996).

"Rate Regulation, Effective Competition, and the Cable Act of 1992." With Stanley M. Besen. *Hastings Communications and Entertainment Law Journal* (1994).

"Assessing Competition and Deregulation in Telecommunications: Some Observations on Methodology." In *After the Breakup: Assessing the New Post-AT&T Divestiture Era*, edited by Barry Cole. New York: Columbia University Press, 1991.

"Deterrence and Justice." With J. Bilmes. *Research in Law and Economics* (1991).

"The First Amendment, Cable MTV, and the Must-Carry Rule: Towards a Cost-Benefit Analysis." *Proceedings of the Airlie House Conference on Telecommunications*, 1987.

"Video Competition and Consumer Welfare." *Proceedings of the Arden House Conference on Video Competition*, edited by Eli Noam. New York: Columbia University Press, 1986.

Misregulating Television. With S. Besen, R. Metzger, and T. Krattenmaker. Chicago: University of Chicago Press, 1984.

"Regulation, Deregulation, and Antitrust in Telecommunications." With S. Besen. *Antitrust Bulletin* (Spring 1983).

"Determinants of Network Television Program Prices: Implicit Contracts, Regulation, and Bargaining Power." With S. Besen and G. Fournier. *Bell Journal of Economics* (Autumn 1983).



"Price Competition, Advertising, and Market Structure." With A. Arterburn. *Southern Economic Journal* (January 1981).

"Exchange Rate Stability and Monetary Policy." With B. Putnam. Albany Discussion Paper #95 in *Review of Economics and Business Research* (Winter 1980).

"Capital Market Integration Under Fixed and Floating Exchange Rates: An Empirical Analysis." *Journal of Money, Credit, and Banking* (May 1980).

OTHER COMPLETED RESEARCH

"Do Government-Imposed Ownership Restrictions Inhibit Efficiency?" *Working Paper of the Bureau of Economics*, No. 169, 1988.

"Empirical Evidence on Efficiencies in the Common Ownership of Broadcast Stations." With K. Anderson. Comments on FCC Proceeding, 1987.

"Over-the-Air Television and Cable Prices: An Econometric Inquiry." With M. Bykowsky. Served as basis of FCC decision deregulating cable prices, 1985.

"The Effect of Rate Regulation and Franchise Delay on Program Availability." With D. Koran. Comments on FCC Proceeding, 1985.

"Pricing Flexibility and Consumer Welfare: The Deregulation of Basic Cable Rates." NCTA White Paper, 1984.

"Economic Assessment of the Financial Interest and Syndication Rules." With K. Anderson. Comments on FCC Proceeding, 1983.

"Private Sales of Satellite Transponders." Comments on FCC Proceeding, 1982.

An Analysis of Television Program Production, Acquisition, and Distribution. With R. Metzger. Network Inquiry Special Staff, Preliminary Report, Federal Communications Commission, June 1990.

"Production Abroad: Theoretical Considerations and Empirical Analysis." Mimeo, 1978.

"Scale Economies in the Airline Industry: A Survey." Mimeo, 1978.

PRESENTED PAPERS

"Market Structure, Program Diversity, and Radio Audience Size." With Robert P. Rogers. Meetings of the Western Economics Association, July 1993.



JOHN R. WOODBURY — Page 6

"The Effects of Rate Deregulation on Cable Subscribers." With K. Baseman. Policy Approaches to the Deregulation of Network Industries: An American Enterprise Institute Conference, October 1990.

"Economic Analysis and Policy Implications of the Financial Interest and Syndication Rule." Telecommunications Policy Research Conference, Airlie House, October 1990.

"The Design and Evaluation of Competitive Rules Joint Ventures for Mergers and Natural Monopolies." With F.R. Warren-Boulton. American Economic Association Meetings, December 1989.

"Do Media Ownership Restrictions Reduce Economic Efficiency?" Telecommunications Policy Research Conference, Airlie House, November 1989.

"Regulation versus Antitrust." Annenberg Conference: The Divestiture Five Years Later, March 1989.

"The Conflict Between Spectrum Efficiency and Economic Efficiency." With R. Rogers. Telecommunications Policy Research Conference, Airlie House, November 1988.

"Regulating Cable Television." Telecommunications Policy Research Conference, Airlie House, September 1987.

"An Empirical Analysis of Television Program Prices." With S. Besen and G. Fournier. Meetings of the Southern Economic Association, November 1981.

"Flexible Exchange Rates and Market Integration." With B. White. Federal Reserve System Conference on Financial Market Research, June 1979.

"Price Competition, Advertising, Market Structure." With A. Arterburn. Meetings of the Southern Economic Association, November 1978.

"The Effects of Exchange Rate Systems on International Capital Market Integration." With B. White. Federal Reserve System Conference on International Research, November 1977.

OTHER PROFESSIONAL ACTIVITIES

Chair, "Competition between Cable Television and Telephone Companies," Telecommunications Policy Research Conference, September 1991.

Discussant, "Competition and Ownership in the Media," Telecommunications Policy Research Conference, September 1991.



JOHN R. WOODBURY — Page 7

Chair, "Spectrum Management Session," Telecommunications Policy Research Conference, Airlie House, September 1988.

Book Review, *Productivity in the United States* by John Kendrick and Elliot Grossman, *Southern Economic Journal*, April 1981.

Discussant, "Deregulation of Telecommunications," Meetings of the Western Economic Association, July 1981.

Referee, *Southern Economic Journal*, *Rand Journal of Economics*, Harvard University Press.

AWARDS

Award for Excellence in Economics (FTC), 1988.

Competition Advocacy Award (FTC), 1987.

Brookings Economic Policy Fellow, 1978–1979.

SUNY Faculty Research Grant, 1978.

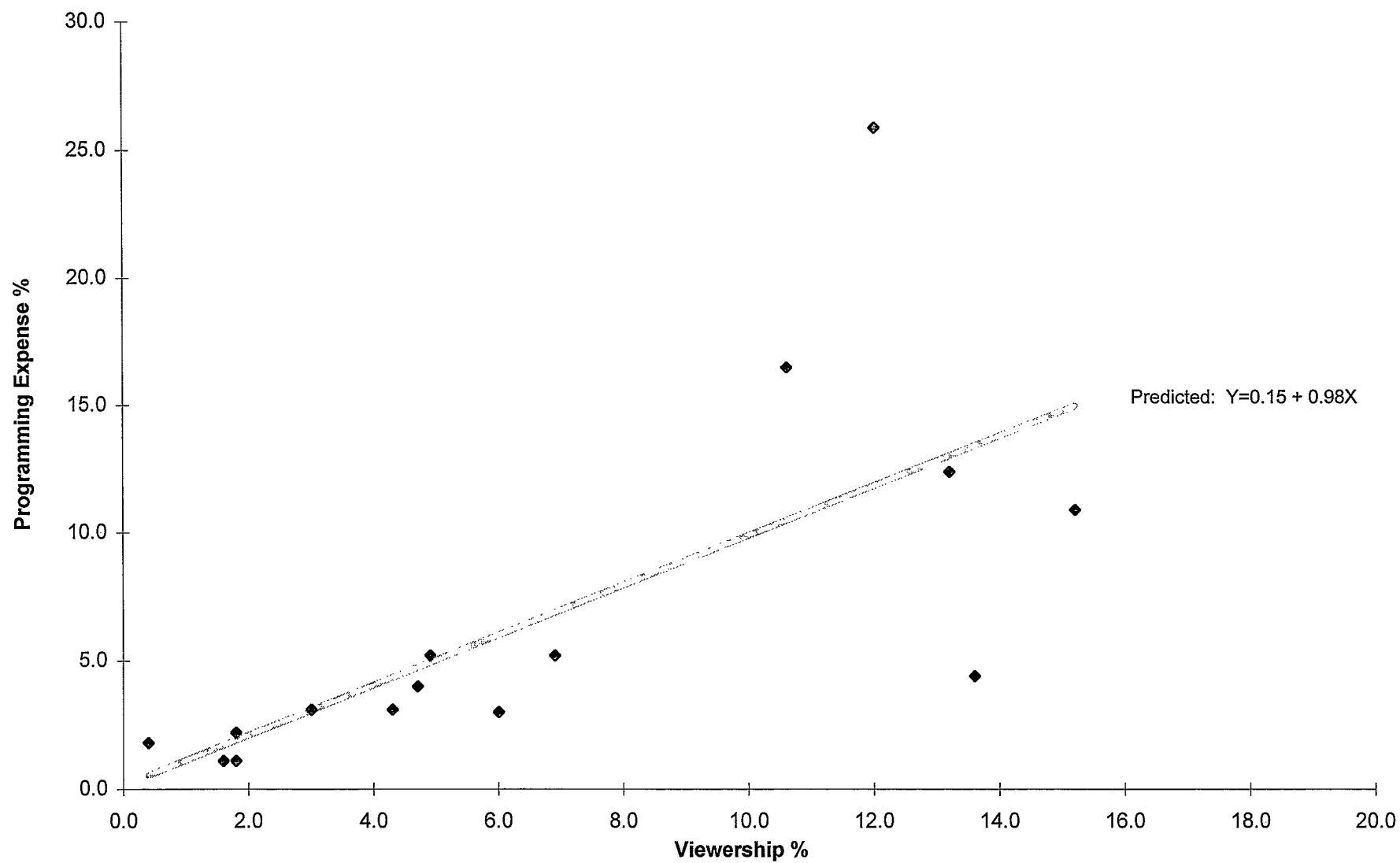
NSF Traineeship, 1973–1974.

Finalist, Woodrow Wilson Fellowship Competition, 1971.



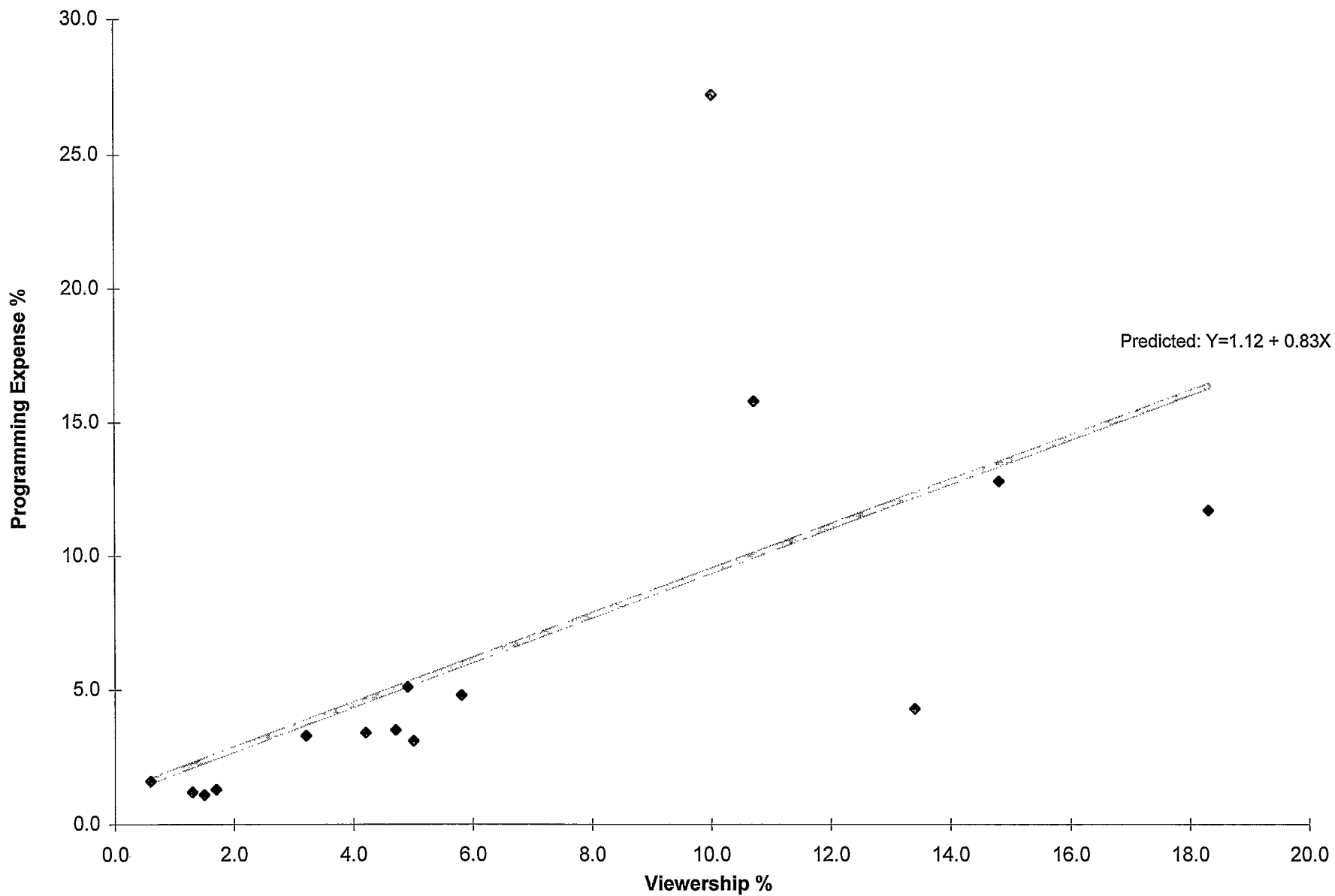
Attachment B

Figure 1
Relationship Between Programming Expense Shares and Viewership Shares
1990



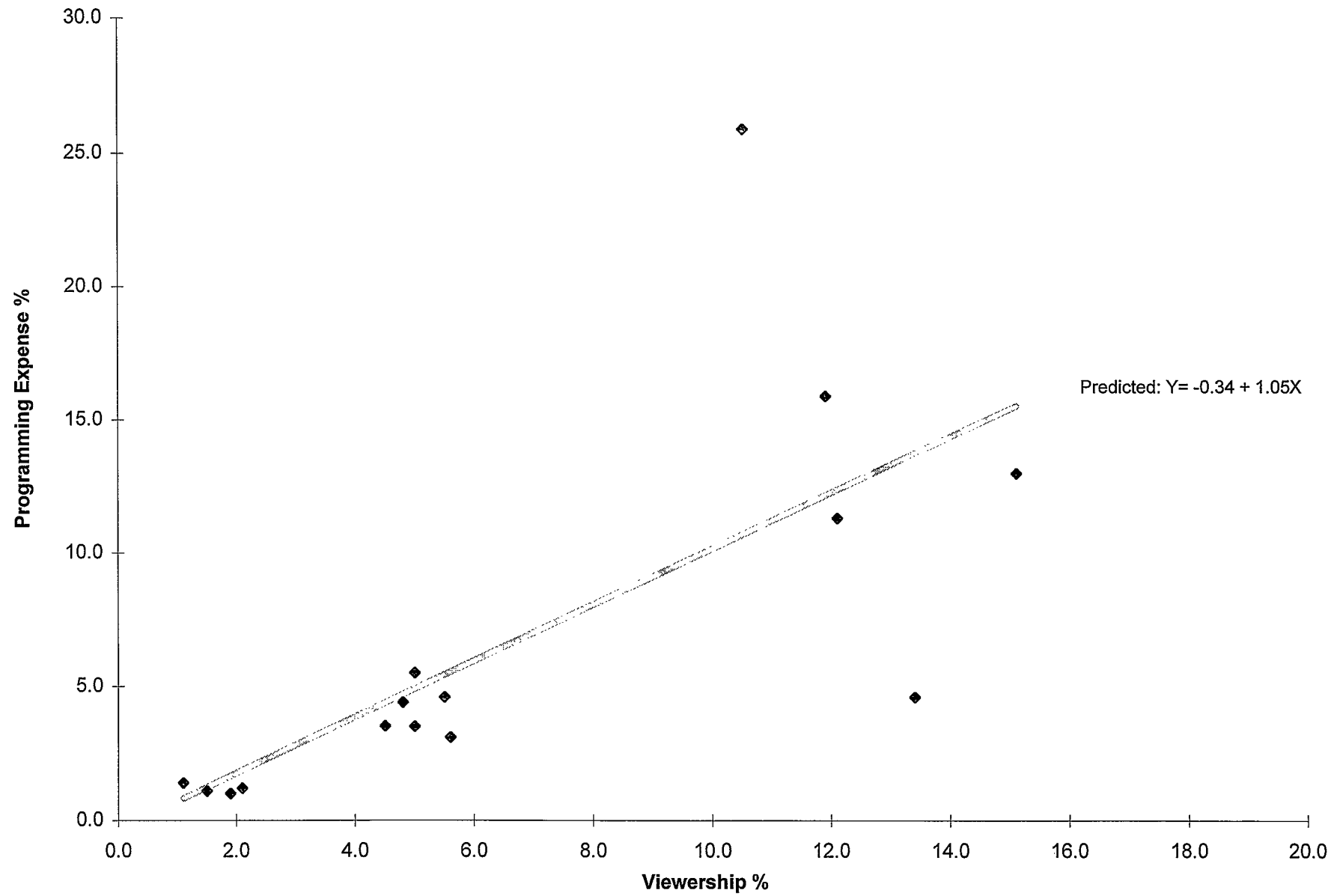
Source: Kagan Media Appraisals, Inc.

Figure 2
Relationship Between Programming Expense Shares and Viewership Shares
1991



Source: Kagan Media Appraisals, Inc.

Figure 3
Relationship Between Programming Expense Shares and Viewership Shares
1992



Source: Kagan Media Appraisals, Inc.

Table 1
Relationship Between Programming Expense Shares and Viewership Shares

<i>Dependent Variable: Programming Expense Share</i>	1990	1991	1992	1990-1992
Coefficient of Viewership Share	0.976256	0.832708	1.051404	0.941453
P-value	0.003843	0.012300	0.003521	Less than 0.0001
Standard Error	0.278166	0.286691	0.295730	0.158205
Lower Bound of the 95% Confidence Interval	0.375315	0.213351	0.412518	0.622402
Upper Bound of the 95% Confidence Interval	1.577197	1.452066	1.690290	1.260505

Figure 4
Relationship Between Affiliate License Fee Shares and Viewership Shares
1990

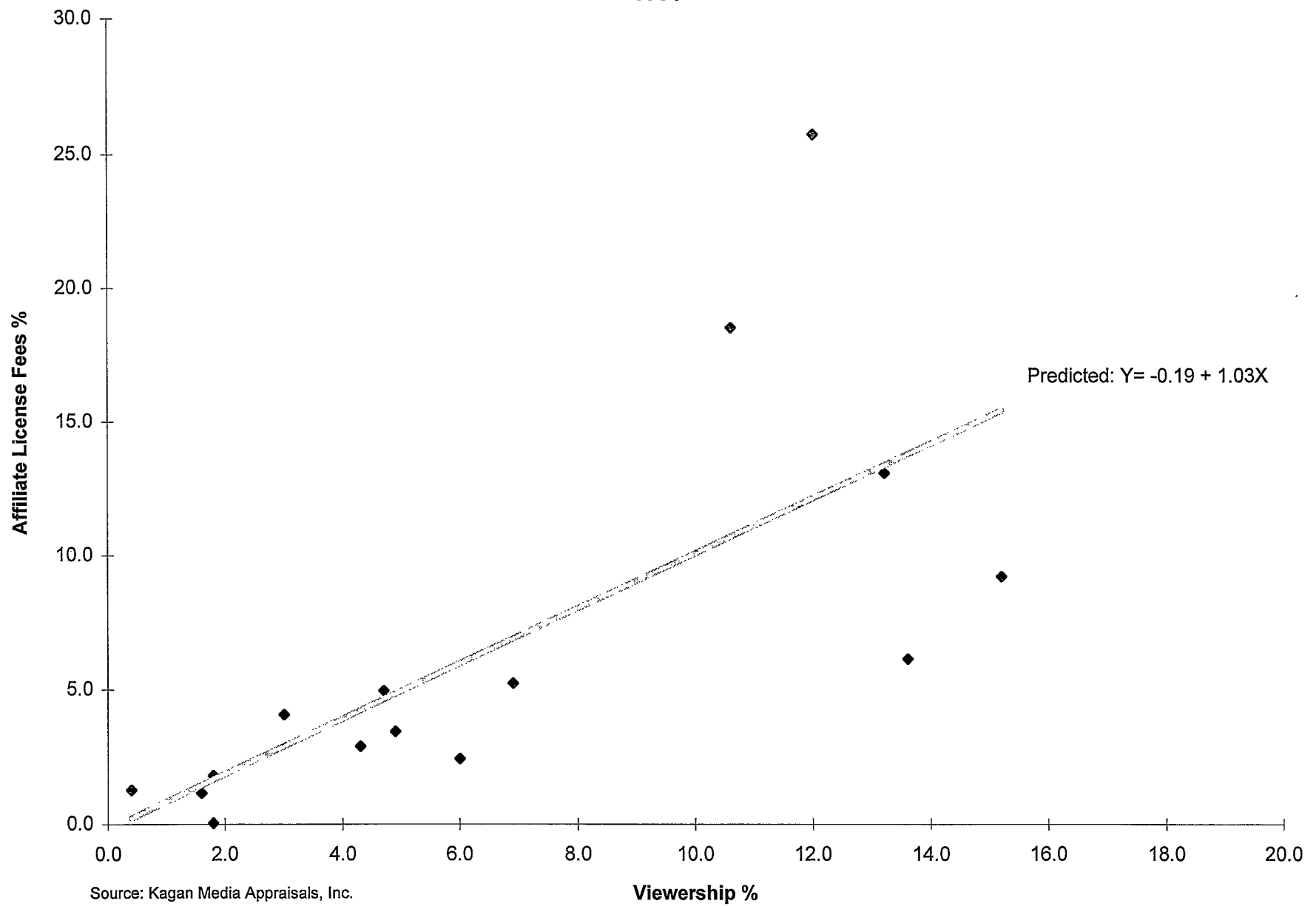


Figure 5
Relationship Between Affiliate License Fee Shares and Viewership Shares
1991

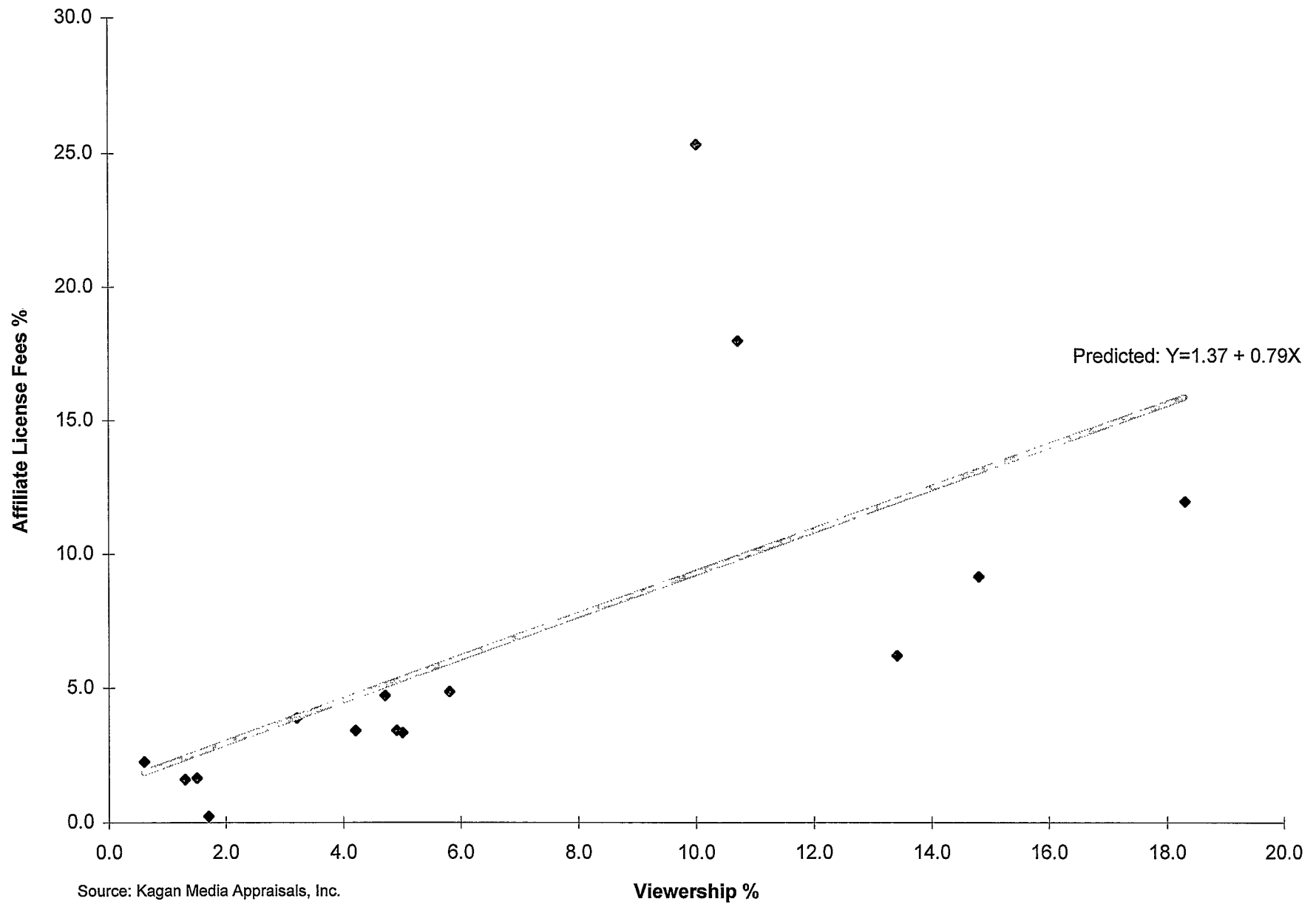


Figure 6
Relationship Between Affiliate License Fee Shares and Viewership Shares
1992

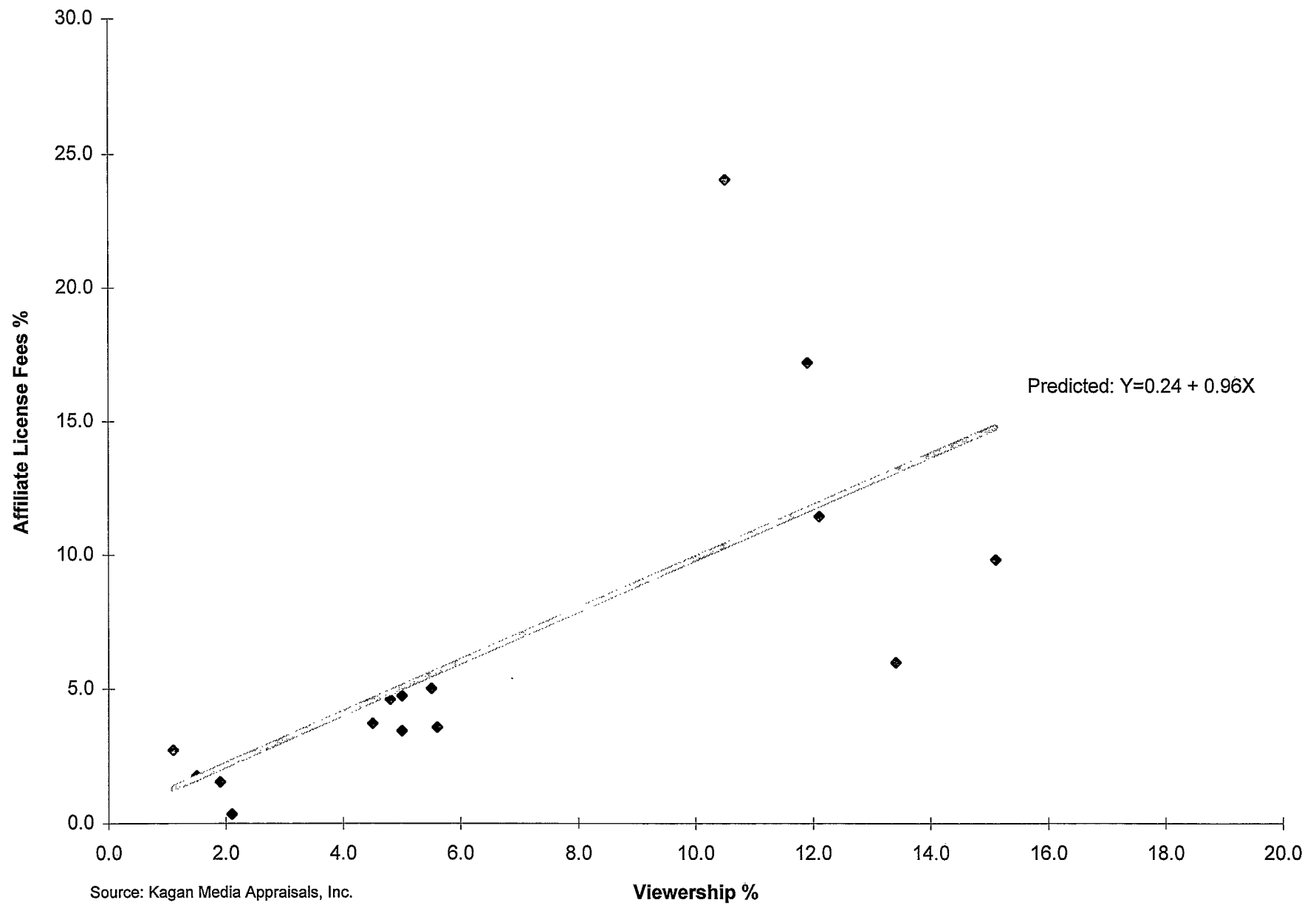


Table 2
Relationship Between Affiliate License Fee Shares and Viewership Shares

<i>Dependent Variable: Affiliate License Fee Share</i>	1990	1991	1992	1990-1992
Coefficient of Viewership Share	1.028391	0.793119	0.964341	0.917970
P-value	0.003238	0.012211	0.004226	Less than 0.0001
Standard Error	0.285738	0.272706	0.278710	0.154038
Lower Bound of the 95% Confidence Interval	0.411092	0.203973	0.362224	0.607322
Upper Bound of the 95% Confidence Interval	1.645689	1.382265	1.566457	1.228617

Table 3
Respondents' Budget Shares and Distant Signal Programming
(Actual Programming Hours)

	1990		1991		1992		1990 - 92	
Programming Category	Coefficient (P-value)	R ²	Coefficient (P-value)	R ²	Coefficient (P-value)	R ²	Coefficient (P-value)	R ²
LOCAL	0.0433 0.1198	0.0202	0.0030 0.9458	0.0000	0.0527 0.1257	0.0214	0.0378 0.0518	0.0712
DEVOTIONAL	0.0782 0.0882	0.0242	0.0462 0.0104	0.0678	0.0371 0.5778	0.0029	0.0539 0.0378	0.0284
SPORTS	-0.0054 0.4389	0.0050	0.0016 0.8223	0.0005	0.0120 0.0828	0.0273	0.0015 0.7076	0.0598
MOVIES & SERIES	0.0122 0.5572	0.0029	0.0354 0.1537	0.0215	0.1535 0.0157	0.0524	0.0587 0.0097	0.0361
PUBLIC BROADCASTING					1.0136 0.0001	0.3891		

Table 4
The Effects of a 20 Percentage Point Difference in Budget Shares*

	Percentage Point Difference in Programming Shares
Local	1.5
Devotional	2.1
Sports	0.2
Movies and Series	2.1

* Results reported here are based on the upper bound of the 95% confidence interval for the parameters estimated in the 1990-1992 regression reported in Table 3.

Table 5
Respondents' Budget Shares and Distant Signal Programming
(Adjusted Programming Hours)

Programming Category	1990		1991		1992		1990 - 92	
	Coefficient (P-value)	R ²	Coefficient (P-value)	R ²	Coefficient (P-value)	R ²	Coefficient (P-value)	R ²
LOCAL	0.0483 0.0395	0.0351	-0.0029 0.9376	0.0001	0.0831 0.0059	0.0674	0.0482 0.0035	0.0980
DEVOTIONAL	0.0224 0.1500	0.0173	0.0022 0.2744	0.0127	0.1130 0.1097	0.0233	0.0376 0.0828	0.0210
SPORTS	-0.0048 0.8306	0.0004	0.0041 0.8531	0.0004	0.0508 0.0069	0.0651	0.0136 0.2765	0.0861
MOVIES & SERIES	-0.0033 0.9067	0.0001	0.0485 0.1129	0.0265	0.1424 0.0225	0.0469	0.0514 0.0337	0.1643

Table 6
The Effects of a 20 Percentage Point Difference in Budget Shares*
(Adjusted Hours)

	Percentage Point Difference in Programming Shares
Local	1.6
Devotional	1.6
Sports	0.8
Movies and Series	2.0

* Results reported here are based on the upper bound of the 95% confidence interval for the parameters estimated in the 1990-1992 regression reported in Table 5.

TESTIMONY OF STANLEY M. BESEN

November 1991

TESTIMONY OF STANLEY M. BESEN

I received my bachelors degree in Economics from the City College of New York (1958) and both masters (1960) and doctorate (1964) degrees in Economics from Yale University. Since 1980, I have been a Senior Economist with the RAND Corporation, Washington, D.C. My participation in this proceeding is as an independent consultant and not as an employee of RAND.

Prior to my employment at RAND, I was a member of the Department of Economics at Rice University (1965-1980) where I held the Allyn R. and Gladys M. Cline Professorship in Economics and Finance. I have served as Visiting Professor of Law and Economics at the Georgetown University Law Center (1990-1991); the Visiting Henley Professor of Law and Business at Columbia University (1988-1989); a member of the Office of Technology Assessment Advisory Panel on Intellectual Property Rights in an Age of Electronics and Information (1984-1985); a member of the Regional Telecommunications Planning Advisory Committee of the City of Cincinnati (1985); a Co-Director of the Network Inquiry Special Staff at the Federal Communications Commission (1978-1980); a member of the Task Force on National Telecommunications Policy Making of the Aspen Institute Program on Communications and Society (1977); a Brookings Economic Policy Fellow at the Office of Telecommunications Policy, Executive Office of the President (1971-1972); an Economist at the Institute for Defense Analyses (1963-1965); and an Acting Assistant Professor of Economics at the University of California, Santa Barbara (1962-1963).

I have appeared as a witness before several United States House of Representatives and Senate committees and subcommittees in hearings regarding the telecommunications industry, cable television, and intellectual property. I have also appeared on several occasions before the Copyright Royalty Tribunal on cable television issues.

For approximately the past 20 years, my research has focused primarily on the telecommunications industry, including analyses of both the economics of the industry and its regulation. This research includes extensive studies of cable television, including studies of entry policy, copyright, ownership, and access.

I have written the following published articles that analyze cable television: Regulation of Media Ownership by the Federal Communications Commission, (The Rand Corporation, 1984, co-author); An Economic Analysis of Mandatory Leased Channel Access for Cable Television, (The Rand Corporation, 1982, co-author); "The Deregulation of Cable Television," Law and Contemporary Problems, (1981, co-author); "Copyright Liability for Cable Television: Compulsory Licensing and the Coase Theorem," Journal of Law and Economics, (1978, co-author); "Economic Policy Research on Cable Television: Assessing the Costs and Benefits of Cable Deregulation," prepared for the Office of Telecommunications Policy, Executive Office of the President (1976) and reprinted in P.W. MacAvoy (editor), Deregulation of Cable Television, American Enterprise Institute (1977); and "The Economics of the Cable Television 'Consensus'," Journal of Law and Economics, (1974).

I have been retained by the Motion Picture Association of America to review and analyze (i) Cable Operator Valuation of Distant Signal Non-Network Programming, 1989, prepared by Bortz & Company, August 1991 [hereafter Bortz statement]; (ii) Testimony of Robert W. Crandall, Ph.D., August 1991 [hereafter Crandall statement]; and (iii) "Use of the Constant Sum Measure and Nielsen Audience Data In Cable Royalty Distribution Proceedings" by Dr. Leonard N. Reid, August 1991 [hereafter Reid statement], all of which have been submitted to the Tribunal in this proceeding. I have also reviewed the transcripts of the testimony by Bortz [hereafter Bortz testimony] and Crandall [hereafter Crandall testimony] in this proceeding.

Summary and Conclusions

The Bortz statement presents the results of a survey of cable television operators which asks essentially the same question about program values as did the study submitted by Bortz in the 1983 proceeding. In the present survey, operators were told to estimate the relative values of each of a number of different types of programming. Specifically, they were asked about the percentages of a fixed dollar budget that they would spend on various types of non-network programs that appear on imported distant broadcast signals.¹ I conclude that, for the same reasons as those that I discussed in the 1983 proceeding, the answers given by cable operators do not provide the information that is needed by the Tribunal to determine the marketplace values of programs of

¹Bortz statement, p. 6.

different types.

The Bortz survey attempts to measure the total value to cable operators of all programs in a given category. As recognized by Crandall, however, the marketplace value of the programs in a given category will depend not on the programs' total value but on their marginal value, the value to operators of the "last" program in that category.² The marketplace value will differ from the total value of the programs because: (a) each additional program is worth less than its predecessor as a result of diminishing returns³ and (b) the price of programs will be driven to their marginal value by competition among program producers. As a result, cable operators will be able to purchase programs for less than their total value, i.e., the operators will obtain a surplus. Inquiring about the total value of various program types simply asks the wrong question.

The obvious way to have dealt with the deficiencies of the earlier Bortz study would have been to take my previous criticisms, which were adopted by the Tribunal, into account in performing a new study.⁴ However, this approach was not taken. Instead, a survey which was, in all relevant respects, the same as the

²See, e.g., Crandall testimony, pp. 1264-1265.

³Bortz makes the same point in response to a question from Chairman Aguero:...each additional game as you increase the amount of that out there is not worth as much proportionately. [Bortz testimony, p. 897.]

⁴This would have involved asking operators about the value to them of additional programs of a given type.

previous study, was undertaken.⁵ After the survey was completed, Crandall was retained to determine whether there were any assumptions under which the answers to the questions obtained in the Bortz survey could be used to provide information about marketplace values.⁶

Crandall, who accepts the validity of my previous analysis, shows that such assumptions do exist. However, this showing does not rescue the Bortz approach. This is so for two reasons. First, the assumptions that Crandall makes -- that the demand curves for all program types by cable operators are linear and that the demand elasticities are the same for all program types at the equilibrium prices -- are highly restrictive.⁷ Under other reasonable assumptions discussed by Crandall, the relationship between total value, which is what the Bortz study is intended to measure, and marketplace value, which is what the Tribunal is attempting to determine, breaks down. In particular, I demonstrate below that even if the demand elasticities of different program types are the same, there can be little or no relationship between total and marketplace values. Indeed, there can even be an inverse relationship.

⁵That is, although there were some technical differences in the way the two studies were conducted, they both asked the same question.

⁶Crandall indicates that he was retained after the Bortz survey was completed and that he played no role in its design or execution. [Crandall testimony, pp. 1263-1264.]

⁷I show below that Crandall's conclusion depends on the assumption that all demand curves are linear.

Second, even if we restrict ourselves to the special assumptions made by Crandall -- linear demand and equal elasticities at market prices -- he provides no evidence that these assumptions are fulfilled in this case. Crandall argues that there is no evidence that the assumptions are not true.⁸ However, since there is no evidence that they are true, we are left at the same point that we were previously: there is still no evidence that the Bortz study provides accurate measures of marketplace values.

Finally, Reid argues that the Bortz approach is widely used in marketing research and that, therefore, it deserves recognition by the Tribunal. However, many of the long list of articles that are cited in the Reid statement are either unrelated to the Bortz analysis or are only tangentially related to it. For this reason, the Reid statement should be used with caution by the Tribunal in reaching its judgment about the approach taken by Bortz.

The Bortz Study

The Bortz study involves a survey in which cable television operators were asked "to estimate the relative value to your cable system of each type of programming carried on [distant broadcast stations]...Assume you have a fixed dollar amount to spend on the non-network programming carried on these stations; in other words, a programming budget. Please think in terms of what percentage, if any, of the fixed dollar amount you would spend on each type of

⁸Crandall statement, p. 14. Crandall contends that there is no evidence that demand elasticities are different for different program types. He does not contend that all demand curves are linear although, as I show below, that assumption is also required for his conclusion to follow.

programming."⁹

In evaluating the present Bortz survey, the first thing to notice about the question posed is that the operators were asked to apportion a fixed program budget among various program categories without any information about the prices at which these program types are available. However, it makes little sense to ask how a person's income would be distributed among a number of products if that person does not know the prices of the various alternatives. For example, given its preferences and income, a household might choose to spend a large proportion of its income, or nothing at all, on a particular commodity. The respondent can tell you this proportion only if it is told the price of the commodity and the prices of all other commodities that it might purchase instead. Since the objective in this proceeding is to determine these prices, the respondents to the Bortz survey could not have been expected to know what they were.¹⁰

Moreover, contrary to the claim by Bortz that cable operators were being asked to carry out a task that they "frequently perform

⁹Bortz statement, p. 6, emphasis in original. As Bortz notes, "In the 1983 BBC survey respondents were asked to allocate 100 percent of the 'value' of their distant signals." Bortz statement, p. 1. Nonetheless, Bortz refers throughout his statement to the responses provided by cable operators as indicating the "values" of the various types of programs, the same claim that was made about the 1983 Bortz survey.

¹⁰As I note below in my discussion of the Reid statement, it may not be necessary for consumers to be informed of the prices of commonly purchased commodities, because it can reasonably be assumed that they are aware of these prices. However, in other cases, consumers can make meaningful statements about their purchases only if they are apprised of the prevailing prices.

in developing actual programming budgets and in evaluating price/value relationships among competing cable services about which carriage decisions must be made,"¹¹ the assignment here is quite different. In the usual case, where the operator determines which services to carry, the prices of the various services are known. These prices typically take the form of a certain number of cents per subscriber per month¹², so that the operator can consider not only the popularity of the service but also its cost in choosing which services to carry.¹³ By contrast, here the operator is being asked to allocate a fixed sum without being told the prices.¹⁴

It now appears to be recognized by the Joint Sports Interests that, at best, the answers to the questions asked in the Bortz survey represent the total value of the programs in a given

¹¹Bortz statement, p. 1.

¹²The amount paid for a given service may depend not only on the number of subscribers to a particular system but also on the total number of subscribers on all systems with the same owner that take the service and on the number of other services that the system takes from the same supplier. Thus, there may be "quantity discounts" both for additional subscribers and additional services.

¹³This is not to suggest that these prices are not negotiable, but only that the operator knows the price of a service when the decision as to whether or not to carry the service is made.

¹⁴The assumption that there is a fixed program budget is also incorrect. Unlike consumers who are limited by their incomes in determining how much they can spend, business firms will increase their expenditures if doing so adds even more to their revenues. Specifically, a cable system will increase its program "budget" if doing so increases its profits.

category.¹⁵ That is, the Bortz survey can be thought of as providing answers to questions like, "How much would you, as a cable operator, be willing to pay for all the programs in a given category rather than do without any of them?" Thus, one can think of the operator as determining the maximum price the cable system would be willing to pay to prevent the complete withdrawal of each program type.

This brings me to a second observation about the Bortz survey. The maximum amount that a cable operator is willing to pay, the reservation price, for all programs within a category consisting of program types A and B combined will be greater than the sum of the separate reservation prices for program types A and B. For example, the sum of the reservation prices for "movies" and "syndicated shows and series" considered separately will be smaller than the reservation price for "movies and syndicated shows and series" considered as a combined category. Similarly, the reservation price for all sports programs combined will exceed the sum of the separate values of, say, professional and intercollegiate sports, or, separately, of baseball, football, basketball, and hockey.

The broader is the category into which programs are combined, the larger will be their combined value in an "all or none" choice. Because the Bortz survey combines all sports into a single category

¹⁵I base this conclusion on the fact that the Joint Sports Interests have sponsored Crandall's testimony, in which he attempts to demonstrate a relationship between total and marketplace values, in this proceeding.

while movies and syndicated shows and series are treated separately, the effect is to increase the reported value of sports programs and to reduce the reported value of movies and syndicated shows and series. Thus, for example, respondents would have reported a value for the combined category in excess of 48 percent, the sum of the separate values of movies (31.2 percent) and syndicated shows and series (16.9 percent) that are reported in the Bortz statement.¹⁶

I conclude that Bortz has attempted to estimate the total value to cable operators of programs in various categories, not the marginal values of those programs. Moreover, the answers given by cable operators to this question are affected by the breadth of the program categories employed. The narrower are the categories, the lower will be total values reported. Since "movies" and "syndicated shows and series" are placed in separate categories and all sports are combined, the effect is to bias the results against movies and syndicated series and shows and in favor of sports.

The Crandall Statement and Testimony

Crandall offers two defenses of the methodology used by Bortz. Both defenses accept the proposition that the answers given by cable operators to the Bortz survey measure the total, not the

¹⁶Bortz statement, p. 2. It should be emphasized that this point is separate and apart from the fact that it is only by separating movies from syndicated shows and series that Bortz is able to claim that "sports programming is the most highly valued non-network programming on distant signal stations." [Bortz statement, p. 3.] Even if the results of the Bortz survey are accepted, a category that consists of "movies and syndicated shows and series" is the most highly valued programming.

marginal, values to the operators of various groups of programs. Crandall nonetheless attempts to show that a marketplace value can be derived from the total value under certain assumptions.

In Crandall's first defense of the Bortz methodology, he (i) accepts the proposition that the marginal value of programs of a given type is the correct measure of their marketplace value; (ii) shows that, under certain conditions, the ratio of the total values of two program types is the same as the ratio of their marginal values; and, finally, (iii) argues that there is no evidence that these conditions are not satisfied here. From this he argues that the relative total values of different program types is the same as their relative marketplace values.

In Crandall's second defense of the Bortz methodology, he argues that, even if cable operators responded to the survey by providing estimates of the total values to them of various program types, these values would correctly measure marketplace values if cable operators are offered "all or none" choices among various "packages" of programs in the marketplace. Neither defense is persuasive.

Crandall's "Conditions"

With respect to Crandall's first defense, he accepts my point that the marginal value of a program is the appropriate measure of its marketplace value. He then shows that, under certain conditions, the ratio of the total values of two program types is

the same as the ratio of their marketplace values.¹⁷ Finally, he argues that, in the absence of evidence to the contrary, the conditions he identifies should be assumed to be fulfilled.

I take issue with this analysis on two scores. First, I show that there are quite reasonable conditions, including those discussed by Crandall in his testimony, in which the relationship between total and marketplace value is severed, or even reversed. Moreover, in carrying out this analysis, I show that even if the condition identified by Crandall -- equal demand elasticities at marketplace prices for all program types -- is fulfilled, it is not sufficient to conclude that total values reflect marketplace values. Crandall's demonstration holds only for linear demand curves. As a result, his conclusion does not necessarily follow even if demand elasticities are the same.

Second, I take issue with Crandall about how to interpret the absence of evidence about whether the conditions that he identifies are fulfilled.¹⁸ Crandall appears to suggest that, in the absence of any information, we should assume that the conditions are fulfilled. However, in the absence of evidence in support of a highly restrictive assumption, there is no reason to accept it as true.

¹⁷Total value is not the same as marketplace value even when this condition is satisfied. The point is that, if the condition is satisfied for any pair of programs, the relationship between their total values is the same as that between their marketplace values.

¹⁸I reiterate that the conditions are even more restrictive than those identified by Crandall.

Indeed, I showed in my previous statement that the relationships between total and marginal values may be quite different, so that knowledge of the total values of two goods may reveal very little about their marketplace values. This is the essence of the "diamond-water paradox," to which I referred in my 1983 statement -- that a good (water) can have a very large total value but a low marketplace value while a good with a small total value (diamonds) can still have a large marketplace value. In short, knowledge of total values can be quite misleading about marketplace values.

The specific defense offered by Crandall -- that the relationship between total values is the same as that of marketplace values under certain conditions -- suffers from a number of shortcomings. The first concerns the statement of the necessary conditions provided by Crandall. As he puts it, "the ratio of total value to marketplace value...will be the same for all program types if their price elasticities of demand are identical."¹⁹ Moreover, as he notes earlier, this condition must be fulfilled "at the equilibrium market prices."²⁰

In the linear demand curve example provided by Crandall, the condition is fulfilled for the three program types treated, sports, movies, and syndicated series at the prices that are assumed. For

¹⁹Crandall, op. cit., p. 13. Crandall has demonstrated this proposition only for the case in which all demand curves are linear. As I show below, for many other cases the statement is not true.

²⁰Id., emphasis added.

each of these program types, the ratio of total value to marketplace value is 2:1, so that the ratio of marketplace values is the same as the ratio of total values for all types.²¹ However, in the example, if the equilibrium price for movies had been 60 instead of 50, their marketplace value would have risen from 500 to 540 while their total value would have been declined from 1000 to 945, as shown in Figure 1.²²

At the higher price, the marketplace value of movies has increased. However, their total value has declined because fewer units are purchased. This means that the ratio of total value to marketplace value is no longer equal to 2 for all program types. While the ratio remains at 2 for sports programs and syndicated series, it declines to $945/540$, or 1.75, for movies. As a result, the total value of movies understates their marketplace value relative to the two other program types.²³

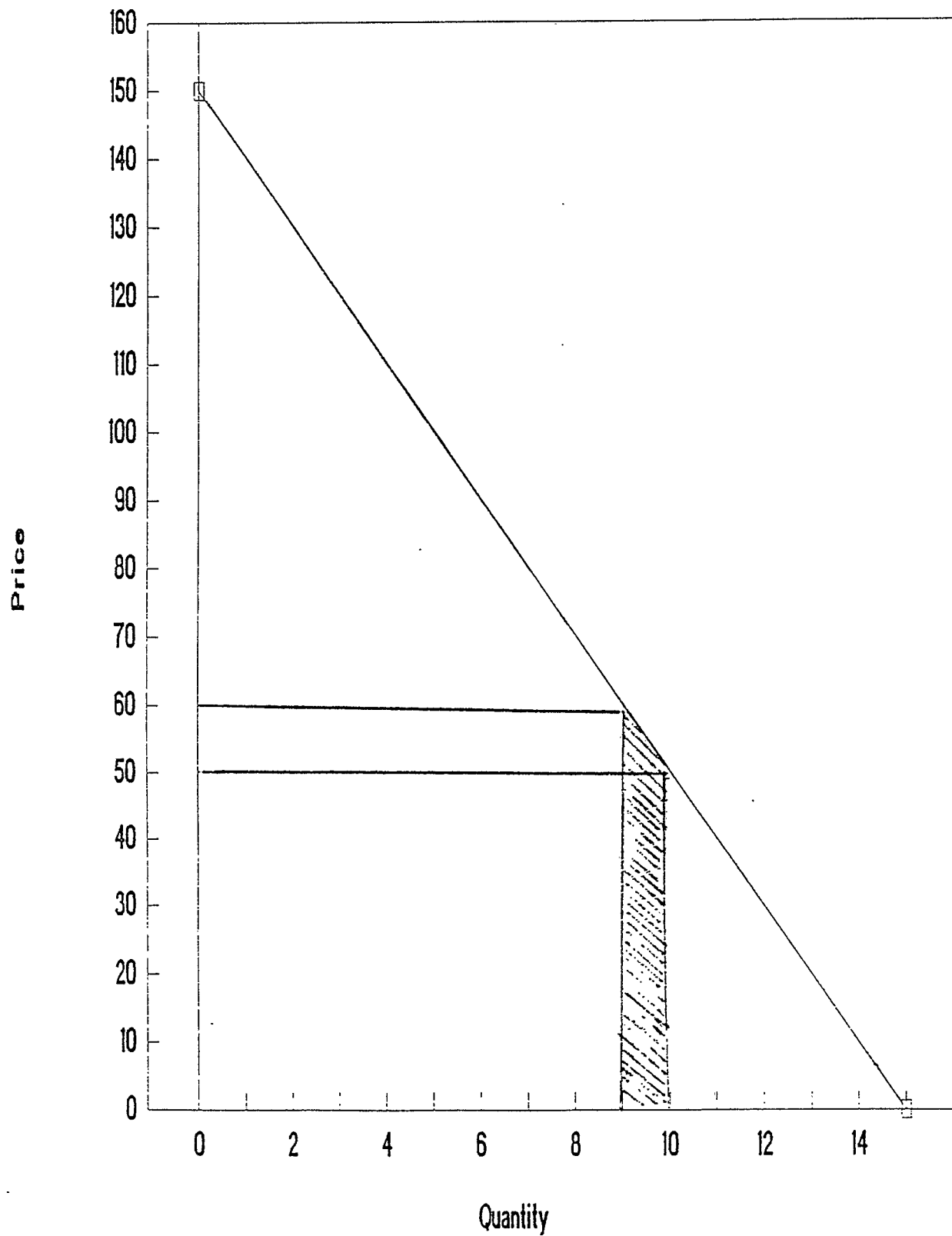
The point here is that, even if the demand curves for the three types of programs are as shown in the example provided by Crandall, the ratios of their total to marketplace values will depend on their respective equilibrium prices. In the example, for the given demand curves, although there are many combinations of

²¹For example, in Crandall's hypothetical, the total value of sports programs is 600 and their marketplace value is 300 while for movies the total value is 1000 and their marketplace value is 500.

²²The decline in total value is shown by the shaded area in Figure 1.

²³Note that this implies that the demand elasticities must be the same for all program types for total values to accurately reflect marketplace values.

Figure 1



prices at which the demand elasticities are the same, there are many others at which they are not. In any event, without knowledge of the prices for each type of program, one cannot ascertain whether the condition is fulfilled. But, since the purpose of this proceeding is to determine what the prices would be, there is no way of knowing whether or not it is fulfilled.

Second, Crandall has not shown that, as a general proposition, the ratio of total value to marketplace value is the same even if the elasticities of demand are the same for all programs at the equilibrium prices. He has shown only that this is so for the case in which all demand curves are linear. Crandall states in his testimony that "I think the same conclusion could follow from constant elasticity demand curves as well."²⁴ This is not the case.

Consider, as one counterexample, a situation in which, instead of being linear, the demand curves have the same constant elasticity and that elasticity is equal to one. Assume further that the demand curves for all program types are identical.

For these demand curves, a one percent reduction in price results in an increase in the quantity demanded of one percent at every price. An important property of such demand curves is that the amount spent, i.e., the marketplace value, is the same at every price.²⁵ This occurs because the percentage change in quantity

²⁴Crandall testimony, p. 1310.

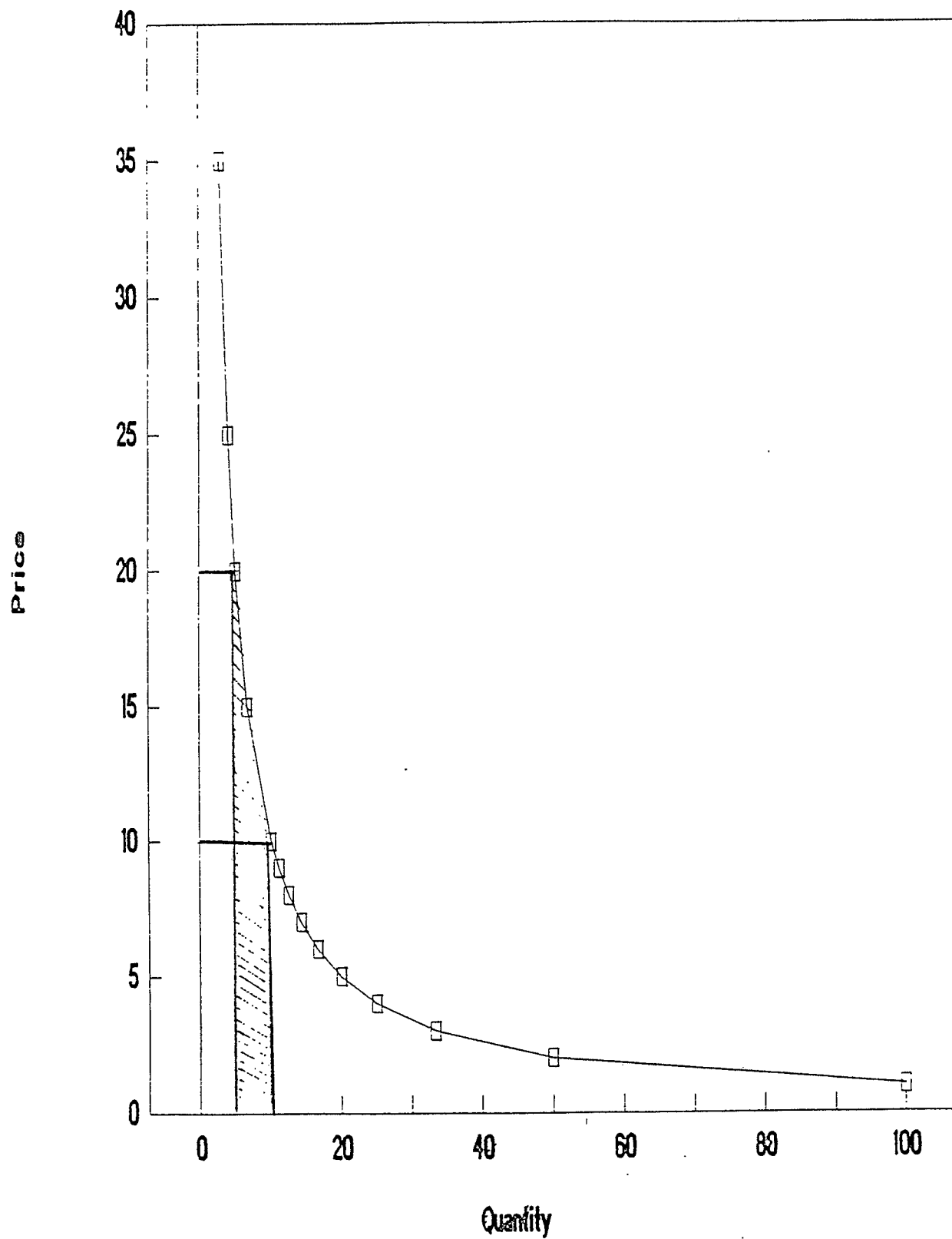
²⁵Recall that the marketplace value is the area of the rectangle bounded by the equilibrium price and the equilibrium quantity.

demanded exactly offsets the associated percentage change in price.

Figure 2 shows this situation. The demand curve for all program types is $Q=A/P$, where Q is the quantity demanded, P is the price, and A is a constant, set equal to 100 in the example. Assume that there are two program types, that the price of program type 1 is 20, so that the quantity demanded is 5, and that the price of program type 2 is 10, so that the quantity demanded is 10. The marketplace value of both programs, which is equal to their marginal values times the quantity purchased of each, is thus 100, 20×5 in the case of program type 1 and 10×10 in the case of program type 2. However, the total value of the two program types is not the same. Because more units of program type 2 are purchased, it has a larger total value. The difference in total values is shown by the shaded area in Figure 2.

In this example, both program types have the same marketplace value because the elasticity of demand is equal to one. However, since the demand curves for both program types are the same, the one with the lower price, type 2, has the greater total value. Thus, although the elasticity of demand is the same for both program types (Crandall's condition), the ratio of total to marketplace value is not the same. Indeed, in this case, there is no relationship at all between total and marketplace values. Thus, even if we believed that all program types have the same demand elasticities, we could not necessarily conclude that the ratios of the total values of different program types are the same as their marketplace values.

Figure 2



As a second counterexample, consider the case in which all program types have identical constant elasticity demand curves with elasticities that are less than one, so that a one percent reduction in price leads to less than a one percent increase in the quantity demanded. For these demand curves, the marketplace value of the programs in a given category declines as the price falls. That is, a reduction in price produces a less than proportionate increase in quantity demanded, leading to a fall in marketplace value. However, as the price falls, the total value of the programs in a given category increases. Thus, although the elasticity of demand is the same for all program types, the lower is the total value of a program type the larger is its marketplace value!

Assume, specifically the demand curve is $Q=AP^{-.5}$, where Q is the quantity demanded, P is the price, and A is a constant which is assumed to equal 100. Consider two different programs types. Program type 1 has a price of 25, so that 20 units are purchased and program type 2 has a price of 16, so that 25 units are purchased.²⁶ The marketplace value of type 1 is 500 ($=25 \times 20$) and the marketplace value of type 2 is 400 ($=16 \times 25$), i.e., type 2 has a smaller marketplace value. These values are shown as the rectangular areas in Figure 3.

Although the marketplace value of type 2 is less than that of

²⁶The quantity demanded can be rewritten as 100 divided by the square root of the price. Thus, if the price is 25, the quantity demanded is 100 divided by 5, or 20, while if the price is 16, the quantity demanded is 100 divided by 4, or 25.

type 1, its total value is greater. This follows because both program types have the same demand curve but more units of 2 are purchased. The difference in total value is shown by the shaded area in Figure 3. We can calculate this area to be 100.²⁷

Both program types have the same elasticities at the equilibrium prices, the condition advanced by Crandall. However, the two program types have different ratios of total to marketplace values. Indeed, here, the program type with the smaller total value has the larger marketplace value.

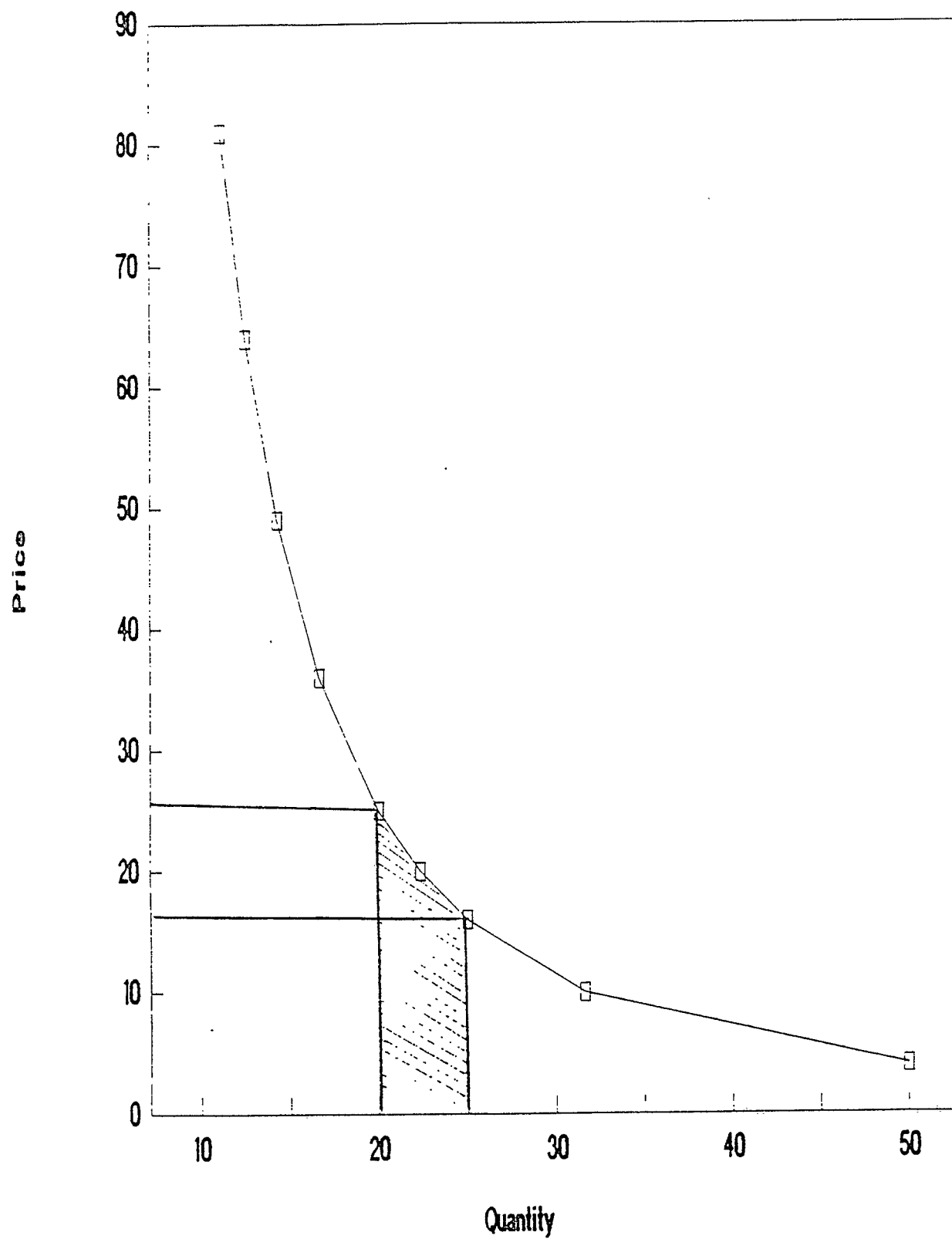
These counterexamples show that the condition required for the marketplace values of programs to have the same relationship to one another as do total values is far more stringent than suggested by Crandall. Not only must the demand elasticities be the same at the equilibrium prices but the demand curves must all be linear. For other reasonable conditions, the relationship does not hold.

Crandall has shown that under highly restrictive conditions -- linear demand and identical elasticities at market prices -- total and marketplace values have the same relationships to one another. Thus, even if Crandall were correct that the demand elasticities were the same for all program types, he would still have to show that all demand curves were linear for his conclusion to follow. And he has not demonstrated that elasticities of demand are the same.

To summarize, total and marketplace values do not have the

²⁷This amount is calculated by rewriting the demand curve as $P=(A/Q)^2$ and calculating the area under this curve between 20 and 25 units.

Figure 3



same relationship to one another if: (a) all demand elasticities are not the same or (b) demand curves are not linear even if demand elasticities are the same. Since Crandall provides no evidence either about the nature of the demand curves or about their elasticities at equilibrium prices, we are left in the same position as in the 1983 proceeding. Bortz has, at best, measured total values, which do not bear any particular relationship to marketplace values.

"All or none" Pricing

Crandall's second defense of the Bortz methodology is to argue that, even if the answers provided by the cable operator respondents reflected the total, rather than the marginal, value of various program categories, these answers would reflect marketplace values if cable operators were offered an entire program category in a package on an "all or none" basis. In this scenario, cable operators would not be permitted to choose how many and which programs to retransmit. Instead, they would be offered, on a "take it or leave it" basis, a number of packages of programs grouped by "type." Under such conditions, Crandall argues that responses by cable operators about total, rather than marginal, values would reflect marketplace values.

Thus, Crandall contends that the Bortz survey would directly measure marketplace values if cable operators were faced with "all or none" choices for the programs within each category. This implies, for example, that operators could be faced with such a choice for a single "package" containing telecasts of all non-

network professional baseball, intercollegiate basketball, professional basketball, intercollegiate football, pre-season professional football, professional hockey, as well as other sports. But, clearly, cable operators cannot be offered such a choice if it is illegal for the suppliers of sports programs to combine to offer such "packages," as is the case.

In Board of Regents of the University of Oklahoma et al v. National Collegiate Athletic Association, 546 F.Supp. 1276, 1326 (W.D. Okla. 1982), the District Court enjoined the NCAA "from acting as the exclusive agent for the sale of telecasting rights to the football games of the member institutions...." In affirming the District Court's decision²⁸, the Court of Appeals for the Tenth Circuit [707 F.2d 1147, 1156 (1983)] found that the NCAA's television plan "contemplates an impermissible integration: a combination of virtually all the producers, actual or potential, of a differentiated product - commercially salable intercollegiate football."²⁹ Moreover, as the Supreme Court observed in affirming

²⁸The case was remanded to the District Court for possible modification of the injunction, but the prohibition against exclusive control of televised intercollegiate football by the NCAA was to be preserved.

²⁹The Court of Appeals' conclusion that intercollegiate football is a differentiated product does not imply that a combination of the suppliers of intercollegiate football and those of other sports would not result in an increase market power. Indeed, the Court notes [Op. cit., footnote 16 at 1159] that "Even assuming that the market definition is too narrow, the NCAA football's apparent uniqueness from the perspective of broadcasters, supports the inference that the NCAA possesses some degree of market power." The Court's conclusion that a monopolist in the market for intercollegiate football would have market power suggests, therefore, that it believes that a monopolist in the market for all televised sports would have even more market power.

the decision of the Court of Appeals ³⁰, "...Congress felt the need to grant professional sports an exemption from the antitrust laws for joint marketing of television rights....The legislative history of this exemption demonstrates Congress' recognition that agreements among league members to sell television rights in a cooperative fashion could run afoul of the Sherman Act...."

For Crandall's second defense of the Bortz methodology to be accepted, owners of programs must be free to offer cable operators "all or none" choices involving broadly-defined program "packages." However, without specific Congressional authorization, such packages cannot be offered. Even the participants in the same sport cannot engage in joint marketing of television rights without an explicit Congressional exemption. A fortiori, participants in a number of different sports cannot. Although exemptions have been granted to permit the members of individual sports leagues to sell their television rights jointly, exemptions have not been given either to intercollegiate sports or to combinations of producers of different types of sports. Since such joint selling is not permitted, the responses given by cable operators to the Bortz survey do not measure the marketplace values of the programs in each category. As a result, this defense by Crandall of the Bortz approach cannot be accepted.

The Reid Statement

I have reviewed a number of the studies that are cited by Reid in support of his claim that "In marketing and other research, the

³⁰104 S.Ct. 2948 (1984), footnote 28 at 2962.

constant sum is frequently utilized as a means of determining how surveyed respondents are likely to act in a choice situation."³¹

It should be emphasized at the outset that several of the studies cited by Reid, e.g., H.A. Michener, M.S. Salzer, and G.D. Richardson, "Extensions of Value Solutions in Constant-Sum Non-Sidepayment Games," Journal of Conflict Resolution, 33, 530-553, 1989, Wolf and M. Shubik, "Beliefs About Coalition Formation in Multiple Resource Three-Person Situations," Behavioral Science, 22, 99-106, 1977, and P. James, "The Canadian National Energy Program and Its Aftermath: A Game-theoretic Analysis," Canadian Public Policy, 16, 174-190, 1990, are completely unrelated to the approach taken by Bortz in the present proceeding. Where the Bortz study asks how a single entity, a cable operator, would allocate a fixed sum among a number of competing alternatives, these studies ask how a number of entities would divide a fixed sum among themselves.³² Although both approaches use the term "constant sum," they are complete unrelated.³³

³¹Leonard N. Reid, "Use of the Constant Sum Measure and Nielsen Audience Data in Cable Royalty Distribution Proceedings," August 1991, p. 4.

³²Another example of a study cited by Reid that has no relevance here is G.E. Monahan, "The Structure of Equilibria in Market Share Attraction Models," Management Science, 33, 228-243, 1987, which analyzes competition between two firms for shares of markets where the sales potential is fixed.

³³In game theory, the subject of these papers, a constant sum game is one in which the amount to be divided among the participants is unaffected by their behavior, i.e., only the distribution of that sum is at issue. By contrast, in non-constant, or variable, sum games, both the amount to be divided and its distribution is determined by the behavior of the participants. It should also be observed here that, despite Reid's inclusion of

Reid also examines a number of studies that make use of some constant sum approach in analyzing consumer behavior. Before proceeding to consider individually some of these studies, two preliminary points must be made.³⁴ First, it is fairly unusual, at least in the studies reported by Reid, for consumers to be asked how they would distribute a fixed amount of money in choosing to purchase among a number of alternative products. Instead, consumers may be asked about their preferences among a number of products or about their preferences among a number of product attributes. But, without more, particularly without knowing the prices at which various goods are being sold, knowing about preferences does not permit one to predict purchases or expenditures. I may prefer a BMW to a Hyundai, but I may still purchase the Hyundai, depending on the relative prices of the two automobiles and my income.

Second, even where purchase decisions are analyzed, it is reasonable to assume that in some cases consumers knew, or were told, or could reasonably infer, the prices of the various products among which they were to choose. For example, in P.E. Green and V. Srinivasan, "Conjoint Analysis in Consumer Research: Issues and Outlook," Journal of Consumer Research, 5, 103-123, 1978, a paper

James, op. cit., in his listing of "constant sum" studies, James (p. 176) notes that "Since the game is deemed to be variable-sum, subsequent analysis focusses on interdependent choice, as opposed to security levels and maximizing minimal pay-offs in a constant-sum game...." In other words, James does not analyze a constant sum game at all.

³⁴I have not examined all of the various studies cited by Reid as "other applications of the constant sum measure." Reid, op. cit., p. 6.

cited by Reid, an example is given of an analysis of consumer perceptions of various vacation sites. In the example, "A set of six factors (say) are selected that are capable of describing vacation sites in general, such as (i) food quality, (ii) sightseeing opportunities, (iii) outdoor sports, (iv) night life/entertainment, (v) chance to meet new friends, and (vi) trip costs." (p. 119, emphasis added) Here, apparently because consumers were being asked to make choices among alternatives with which they were unfamiliar, it was necessary to provide them with information about relative prices. Similarly, in H. Muhlbacher and G. Botschen, "The Use of Trade-Off Analysis for the Design of Holiday Travel Packages," Journal of Business Research, 17, 117-131, 1988, where a constant sum approach was used to determine how consumers would allocate a fixed amount of time among alternative holiday travel packages, the attributes of the packages about which information was provided to respondents were "destination, accommodation, number of nights, cost per day, and type of vacation." (p. 123, emphasis added)

To be sure, prices are not provided to respondents in all of the studies cited by Reid, although, as already noted, many of these studies inquire about preferences rather than choice. However, it is important to note that, where purchases are frequent, consumers are likely to be aware of prices, so that information about prices does not have to be provided to them. This may explain why in R.I. Haley and P.B. Case, "Testing Thirteen Attitude Scales for Agreement and Brand Discrimination," Journal of

Marketing, 43, 20-32, 1979, another paper cited by Reid, the survey of consumer attitudes was confined to "Six package goods categories with relatively high frequency of purchase and a large portion of sales concentrated among a comparatively small set of brands...." (p. 22)³⁵ Consumers who purchase frequently among a small number of brands are likely to know the prices of the alternatives without being told what they are.

Among the studies cited by Reid which purport to support the approach taken by Bortz in the present proceeding are the following:

1. In M.A. Abernathy, "The Accuracy of Diary Measures of Car Radio Audiences: An Initial Assessment," Journal of Advertising, 18, 33-39, 1989, the objective was to assess "the accuracy of diary measures of car radio listenership both by daypart and by station." (p. 35) As part of the study, each subject was initially asked to report the percentage of time he listened to each radio station in the market and the percentage of his total radio listening time that was done during particular time slots. These are described in the paper as "Constant-Sum Questions," since the subjects were asked to report percentages for various categories and their answers must add up to a constant, 100 percent. However, this application of the "constant sum methodology" is hardly the same as the one used by Bortz. The Abernathy study asked subjects about how they actually allocated their time among alternatives, not how

³⁵This study involved a comparison among alternative scales, and did not endorse the constant sum approach.

they would do so in a hypothetical situation. Moreover, the "price" of an hour of time is known. It is exactly one hour. Because the Abernathy study asked about actual behavior and did so in a situation in which prices were known to respondents, it does not provide support for conducting a study in which respondents are asked about hypothetical choices where prices were not known, as in the Bortz study.

2. A.B. Blankenship, A.B., "Let's Bury Paired Comparisons," Journal of Advertising Research, 6, 13-17, 1966, attempts to analyze a number of ways in which consumer preferences among alternative products might be identified. As far as I can tell, it does not use a "constant sum methodology" at all. The word "constant" does appear in the paper when the author discusses the use of "a constant control...to overcome the problem of knowing whether your results are in the good or the poor portion of the [preference] field." (p. 16) This study provides no support for the use of the constant sum approach.

3. Clancy, Kevin J., and Robert Garsen, "Why Some Scales Predict Better," Journal of Advertising Research, 33-38, analyzes the tendency of some respondents to consumer surveys to rank all products "high" or all product "low" when they are faced with monadic preference scales [which] attempt to measure a consumer's interest in a brand or product on an absolute basis." (p. 33) Based on the findings of a survey, the authors are led to conclude that "future study using comparative preference scales, such as the constant sum procedure and paired comparison methods, should be

conducted....Perhaps an optimal study design should incorporate both monadic and comparative methods." (p. 38, emphasis in original) The support this study provides for the use of the constant sum approach is quite limited since it essentially argues that more research is needed and that the other approaches are also likely to be required in understanding consumer choices.

4. Conant, Jeffrey S., Michael P. Mokwa, and Steven D. Wood, "Management styles and marketing strategies: An analysis of HMOs," Health Care Management, 12, 65-75, 1987 reports the results of a survey of various marketing strategies employed by Health Maintenance Organizations. The principal purpose of the survey is to study the relationship between four management styles adopted by HMOs and the marketing approaches that they employed. As described by the authors, "respondents were asked to allocate 100 points among a fixed number of marketing-related categories to reflect the relative importance of alternative marketing mix elements, advertising media, promotional themes, pricing variables, and market research topics." (p. 69) Each of the respondents was thus asked to report the "relative importance" to their marketing strategies of a number of "categories" for each of the five dimensions listed. The respondents were not asked to indicate how they would allocate a fixed amount of money among a number of alternatives.³⁶ Thus, this study is of no relevance to the approach taken in the Bortz study.

³⁶For all but one of the dimensions, such a question would have been meaningless, but even in the case of alternative advertising media, where such a question could have been asked, it was not.

My conclusion after reviewing a number of the studies cited by Reid is that they do not support the approach taken by Bortz. Some of the articles listed are completely unrelated to the Bortz study. Many others are related only tangentially. None appears to be directly on point. Perhaps in the extensive list of articles provided by Reid there are studies that are directly relevant to the approach taken by Bortz. I have not been able to identify such studies. The Reid statement would perhaps have been more useful to the Tribunal if it had reported studies that are directly related to the Bortz study instead of merely citing a large number of studies that seem to bear at best a loose relationship to the Bortz survey. In any event, the Tribunal should carefully examine the references provided by Reid to determine whether they provide the support for the Bortz approach that Reid claims.

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Education

City College of New York
B.B.A., Economics (1958)
Yale University
M.A., Economics (1960)
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Professional Experience

1980-present - Senior Economist, The Rand Corporation, Washington, D.C.

1990-1991 - Visiting Professor of Law and Economics, Georgetown University Law Center

1988-1989 - Visiting Henley Professor of Law and Business, Columbia University

1985-1988 - Coeditor, Rand Journal of Economics

1978-1980 - Co-Director, Network Inquiry Special Staff, Federal Communications Commission

1971-1972 - Brookings Economic Policy Fellow, Office of Telecommunications Policy, Executive Office of the President

1965-1980 - Assistant Professor, Associate Professor, Professor of Economics, Allyn R. and Gladys M. Cline Professor of Economics and Finance, Rice University

1963-1965 - Economist, Institute for Defense Analyses

1962-1963 - Acting Assistant Professor of Economics, University of California, Santa Barbara

Consultancies

The Rand Corporation, 1972-1978

Office of Telecommunications Policy, Executive Office of the President, 1972-1977

Texoma Regional Planning Commission, 1975

Department of Defense, 1967

Professional Activities/Honors

Member, Editorial Board, Economics of Innovation and New Technology, 1989-present

Member, Office of Technology Assessment Advisory Panel on Communications Systems for an Information Age, 1986-1988

Member, Regional Telecommunications Planning Advisory Committee, City of Cincinnati, 1985

Member, Office of Technology Assessment Advisory Panel on Intellectual Property Rights in an Age of Electronics and Information, 1984-1985

Expert, World Intellectual Property Organization/UNESCO Meeting on Unauthorized Private Copying of Recordings, Broadcasts and Printed Matter, 1984

Who's Who in America, 1982-1983, 1984-1985, 1986-1987, 1988-1989, 1990-1991

Who's Who in Finance and Industry, 1992-1993

Member, Editorial Board, Southern Economic Journal, 1979-1981

Member, Task Force on National Telecommunications Policy Making, Aspen Institute Program on Communications and Society, 1977

Brookings Economic Policy Fellow, 1971-1972

Member, Technical Advisory Committee on Business Development, Model City Program, City of Houston, 1969-1971

Wilson University Fellow, 1959-1961

Overbrook Fellow, 1958-1959

Beta Gamma Sigma, 1958

Publications

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**DIRECT TESTIMONY OF ROBERT P. SIEBER
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TURNER ENTERTAINMENT NETWORKS**

I am Vice-President of Audience Development for Turner Entertainment Networks (TEN). I have held this position since September of 1992. TEN owns and operates the Cartoon Network, Turner Network Television (TNT) and TBS Superstation, the most viewed distant signal in the United States.

Prior to joining the entertainment division, I was V.P. of Research for the parent company, Turner Broadcasting System, Inc., a position I held since 1981. Turner Broadcasting is the leading supplier of entertainment and news programming for the basic cable industry in the United States. As head of research for the Company, my primary responsibilities included programming research for TBS Superstation, The Cartoon Network, TNT, CNN, and Headline News. My research group also supported affiliate sales (sale of our network services to cable systems), advertising sales, advertising and promotion and other corporate functions.

I joined Turner Broadcasting in March of 1978 as Director of Marketing for WTCG (now TBS). In this position, I developed the marketing and research tools required to meet the demands created by the rapid development of the Company's satellite-distributed SuperStation. Under my direction, Turner Broadcasting became a leader in the development of cable television audience measurement, including the first A.C. Nielsen national metered ratings for cable networks: for TBS Superstation in February 1981, and later for CNN in April 1982. Working with Nielsen, I also developed the first daily (overnight) national ratings for basic cable.

Prior to joining Turner Broadcasting System, I was Director of Research for Cox Broadcasting Corporation (1975-1978). My responsibilities included managing the programming and sales research activities of seventeen Cox radio and television properties, with additional responsibilities covering the company's cable television and non-broadcast divisions. I held other research positions at Cox (1971-1975), with prior experience in the promotion and research department of WGN Continental Broadcasting (1970).

I have earned numerous industry awards during my career, among them the first Jack Hill Award for Excellence and Integrity in Media Research (1989) presented by the Cable Television Advertising Bureau (CAB) and also received the President's Award from CAB and the TAMMY from the Cable Television Administration and Marketing Society. During 1987 and 1988, I chaired the CAB's Committee on National Cable Audience Measurement (CONCAM). I serve on the Board of Directors of the Advertising Research Foundation and chaired the organization's 1990 36th Annual Conference. Additionally, I am a charter member of the Georgia State University Marketing Roundtable.

My formal education includes an MBA degree in marketing from Indiana University (1970) and I hold a Bachelor of Science degree in Industrial Management from Purdue University (1968).

My media research career now includes more than twenty years of experience covering radio, network affiliate and independent television as well as leading cable television networks. I have filed comments before the Federal Communications Commission and have acted as an expert witness in a court of law.

MARKETPLACE NEEDS: WHAT THE CABLE SUBSCRIBER WANTS FROM PROGRAMMING

The networks of Turner Broadcasting regularly survey the attitudes of their subscribers -- both viewers and non-viewers. In the Spring of 1991, TBS Superstation commissioned Opinion Research Corporation (ORC) of Princeton, NJ to conduct a survey of its subscribers. This project can be best described as an image assessment, market segmentation and positioning study.

As a necessary step in the process of identifying and defining "natural market segments," a market need structure (need/want attribute battery) was developed based on questions directed to one-thousand two hundred and fifteen cable subscribers (adults 18-64) who were aware that they received TBS Superstation.

All respondents in the study were asked to rate a list of 37 attributes regarding their preferences in choosing a television station or cable network. A scale of -5 to +5 was used. Negative numbers indicate that the feature is disliked in a television station or cable network. Positive numbers indicate that the feature is liked in a television station or cable network. Using the same -5 to +5 scale, all respondents were asked how much they would actually like to receive 26 different types of programs that could appear on a television station or cable network.

The attached chart graphically depicts the Market Need Structure, or the average degree of importance respondents place on each of these attributes. The bar graph allows the reader to view, at a glance, the relative importance of each of these features.

Specifically, the chart shows the proportion of respondents who rated each feature unfavorable (not important/unwanted in a cable network), neutral or favorable (important/wanted in a cable network.) The dark solid part of each bar represents the percentage "unfavorable" towards that feature (feel it is unimportant), the white and shaded areas represent the "neutral" (somewhat important) and "favorable" (important) proportions, respectively.

The results for all categories are shown. More than anything else, subscribers seek high quality programming. Third on the list was "programs the whole family can watch." The fourth most important attribute was "a wide variety of programs." Twelfth in rank was "show a lot of movies." "Situation comedies" placed seventeenth. Sports was not a factor until the 38th position: "variety of sports," just behind "classic programming" and "animation." "Show a lot of sports" placed fifty-first on the list.

This study was commissioned as part of the normal conduct of our business. The main objective of the research was to develop the information necessary to strategically position TBS Superstation in the highly competitive cable marketplace.

TBS uses studies like this one along with ratings information to program its schedule. TBS offers a wide variety of high quality syndicated series and movies that are attractive to the whole family. As I discuss later, TBS ratings support the view that subscribers not only say they want syndicated programs, but they watch them as well.

The attitudinal research underscores the importance of feature films and series programming to the cable subscriber. To illustrate the wide variety of programming offered by TBS SuperStation in 1990, attached are sample program schedules for the network. These schedules demonstrate the heavy reliance placed on series programming and feature films.

In 1990, major sports accounted for approximately 5% of total TBS SuperStation programming time; movies approximately 45% and series programming approximately 40%. The remainder consisted of "other" sports, documentaries, paid programming and one-time-only specials.

TELEVISION RATINGS AND THE INDUSTRY

The importance of television ratings to the cable industry can be demonstrated in many ways.

Ratings and Carriage: Pricing, program quality, variety, exclusivity, and many other factors influence whether or not a particular service will be offered. But in the end, the extent to which services are viewed (used) by the subscriber plays a strong role in determining carriage.

Cable operators may have been willing to try new channels when capacity was freely available, but from what I have seen over the years, unless a channel attracts a fair amount of viewing, it will face limited carriage or be dropped altogether. Over time, the most heavily watched channels are the ones that not only continue to be carried, but also are carried by the largest number of systems.

The attached scatter diagram illustrates the relationship between ratings and carriage for 1990. Total day national ratings are shown on the Y-axis and homes serviced on the X-axis. This relationship is plotted for each of the nineteen (19) basic cable networks measured by A.C. Nielsen in 1990.

Ratings are a measure of how well each network attracts viewers from all the subscribers who receive it. Ratings are measured by the ratio of the average audience watching the network to the total number of subscribers who can receive it. A network with a small number of subscribers could receive the same rating as a network with a large number of subscribers because of how the ratings are determined.

The average audience which is expressed as a rating results from the number of different household that tune to a network and the time these subscribers spend viewing the service. Low ratings — a small proportion of the total subscribers watching on average — result from either...

- (1) A small number of different subscribers tuning to the channel.
- (2) Subscribers tune in, but spend a small amount of time viewing.
- (3) Or, a combination of these two factors.

Lower ratings equate to a lower subscriber involvement and more limited appeal. In my view, cable operators are much less willing to carry the less-watched (lower rated) services.

A.C. Nielsen data for 1990 contained in Table 1 and displayed on the following graph illustrate the point:

Cable networks with relatively low ratings tend to be carried by fewer systems than services with high ratings.

TABLE 1
1990 NETWORK RATINGS AND HOMES SERVED*

NETWORK	AVERAGE TOTAL DAY RATING	AVERAGE HOMES SERVED (000) 1990
NTN	0.10	8204
CNBC	0.10	16732
FNN	0.11	33461
VH-1	0.18	37491
TWC	0.19	45028
BET	0.28	27989
HLN	0.35	43143
A&E	0.36	45428
DISC	0.48	51156
FAM	0.51	50294
MTV	0.53	51724
TNN	0.56	44404
LIFE	0.57	49572
CNN	0.70	55615
NICK	0.84	51980
ESPN	0.87	56365
TNT	0.94	47265
USA	1.19	53013
TBS	1.54	54615

* **NOTE:** Tabulated by TBS Research from Nielsen Cable Activity Reports (NCAR for Quarters I-IV, 1990. NTN data available only for QIV. CNBC data available only for QIII and QIV. These data are for A.C. Nielsen's national, metered panel.

Carriage Contractually Related to Ratings: Over a period of years, Turner Broadcasting System has had numerous discussions with cable operators over the subject of ratings as a proposed determinant of fees charged for our cable networks. A major multiple service operator (MSO) repeatedly proposed a contract that called for downward adjustments in fees as ratings declined. The proposed contract also allowed for the deletion of service once ratings dropped below specified threshold levels.

During 1990 Turner Cable Network Sales (TCNS) the affiliate sales division of our company, wrote contracts to accommodate the potential of federally mandated must-carry restrictions. Specifically, cable systems are required contractually to first delete the lowest rated cable networks in the advent that limited channel capacity forces them to replace cable services with local stations.

Following is language from one such contract that was in force during 1990. This agreement was between a major MSO and TNT...

"Must Carry Reinstatement. In the event that federally mandated must carry restrictions are imposed upon AFFILIATE during the Term and AFFILIATE is forced to clear a channel previously dedicated to a satellite delivered basic cable television service, and no other vacant channel is available for the addition of the mandated broadcast signal on the System, then AFFILIATE may drop the Service provided that it has first ceased distributing each of the other satellite delivered basic cable services which are not nationally rated and/or which had a lower 18 hour average rating (7:00a.m.-1:00a.m., Mondays-Sundays) during the immediately preceding twelve (12) month period using the Nielsen National Rating System".

Increased Subscriptions to A.C. Nielsen Data: In 1980, none of the cable networks or superstations were measured by Nielsen's national metered panel. By 1990, 19 basic cable networks had contracts with A.C. Nielsen for national data, with most services receiving daily, "overnight" measurements 365 days a year, 24 hours a day in addition to published monthly and quarterly reports. Today, 27 basic cable networks subscribe to regular, national measurement.

In addition to producing individual reports for these networks, Nielsen also publishes "syndicated" reports summarizing cable audience performance for each service. These reports are widely distributed to ad agencies, program suppliers and cable systems and contain household and demographic viewing data.

By Nielsen's count, approximately 150 MSO's and individual systems subscribe to data including CAP (Cable Audience Profile) reports (local estimates of cable network performance), telephone coincidental (special surveys conducted locally), diary and metered-based special tabulations of local data and national ratings for cable networks.+

But, more important is the fact that most MSO's and individual systems receive national ratings data from the cable networks themselves -- a permissible use under the contracts program suppliers have with the A. C. Nielsen Company.

+ ***NOTE: The Arbitron Company, Nielsen's main competitor in the local ratings business also sells special surveys and diary/meter tabulations on a local level to systems.***

**NATIONALLY FEATURE FILMS AND SERIES PROGRAMMING "TRAVEL" BETTER THAN SPORTS:
THE VALUE OF A MORE HOMOGENEOUS AUDIENCE**

For a national cable network to succeed it is important to both advertisers and cable systems that the network's programming performs well across individual markets and regions. The challenge for the programmer is to find programming with universal appeal. National advertisers are adverse to clumps of viewing – peaks and valleys on a market by market basis. National advertisers prefer programs with uniform geographic appeal. Similarly, systems expect cable networks to perform as well with their local subscriber as they do nationally. National ratings establish levels of expectation.

The following table has been prepared to illustrate the differing regional appeals of series, feature films and sports programming carried on TBS SuperStation in 1990. The distribution of viewing to these programs has been compared to the regional distribution of homes receiving TBS:

**TABLE 2
DISTRIBUTION OF AVERAGE AUDIENCE – TBS SUPERSTATION****

		PACIFIC	WEST CENTRAL	SOUTH	EAST CENTRAL	NORTH- EAST
PRIME MOVIE	% DIST	12.1%	15.9%	40.6%	15.8%	15.5%
	INDEX	69	105	130	108	72
4-6PM SERIES	% DIST	11.2%	14.9%	43.4%	15.6%	14.9%
	INDEX	64	99	139	107	69
HAWKS BASKETBALL	% DIST	16.7%	12.2%	43.6%	12.5%	15.0%
	INDEX	95	81	139	86	70
SEC FOOTBALL	% DIST	6.1%	6.3%	74.6%	8.4%	4.6%
	INDEX	35	42	238	58	21
BRAVES BASEBALL	% DIST	10.5%	10.5%	56.3%	12.3%	10.3%
	INDEX	60	70	180	84	48
HOMES	% DIST	17.6%	15.1%	31.3%	14.6%	21.5%
RECEIVING TBS	INDEX	100	100	100	100	100

Most sports carried by TBS SuperStation have a distinctly regional appeal. Although viewing to series and movies does not occur exactly in proportion to the distribution of TBS subscribers, viewing patterns are much

more uniform than is the case with sports. Regional skew devalues the sports product for cable systems where viewing is below average. Feature films and series "travel" better than sports.

**** NOTE:** *The table reads as follows: 31.3% of the homes receiving TBS SuperStation are located in the South. Of the total national audience viewing SEC Football, 74.6% of the viewing originated from the South – 2.38 times the proportion of TBS receiving households located in this region (an index of 238.)*

All viewing data are from A.C. Nielsen local market diary-based surveys, tabulated on a regional basis by TBS Research. Prime Movie, 4-6PM series and SEC Football from November 1990 data. Hawks Basketball from February 1990 viewing and Braves Baseball from May 1990 data. Regional definitions based on A.C. Nielsen classification of 211 local television markets.

UNDERSTANDING SPORTS RIGHTS FEES FOR SUPERSTATION TBS

Prior copyright Tribunal testimony has dealt extensively with the issue of the rising costs of licensing sports programming. Examples have often depicted the scenario for basic cable networks. Comparisons need to be developed for imported distant signals, since the fees paid for sports programs differ significantly. (Unlike the majority of basic-cable networks, sports carried by TBS SuperStation contain no local advertising availabilities for cable systems. At a time when the reregulation of the cable industry has placed limits on the fees operators charge subscribers, "other" revenue sources, including local advertising, has become more important. The presence of local avails makes sports packages attractive to operators. The ability to provide local advertising positions is an important sales tool for cable networks when they seek carriage and rate justification. The absence of such avails for retransmitted signals like TBS means that sports packages are of less value. The Goodwill Games were sold to cable operators in 1990 as a separate satellite feed to be inserted on the TBS local channel, covering regular TBS programming. This separate, non-broadcast feed allowed for local ad avails and was offered in this manner for that very reason.)

The best measure of sports rights fees in the case of TBS SuperStation is the compensation paid to the Atlanta Hawks and Atlanta Braves for telecast rights.

During 1990, TBS SuperStation provided \$2,591,182 to the Atlanta Hawks for the right to telecast 25 games. This works out to approximately \$22,000 per half hour of television.

Compensation paid to the Atlanta Braves in 1990 totaled \$3,097,000 or roughly \$4,700 per half hour of television for 109 games telecast.

In January 1985, an agreement was reached between ANLBC (Atlanta Braves) and the Commissioner of Baseball relative to the nationwide television exposure afforded the broadcasts of Braves games on TBS SuperStation. The agreement requires the Company to make fee payments into the Major League Central Fund for equal distribution to all major league baseball clubs including the Braves. In exchange for these fees, the

Commissioner of Baseball, among other things, will not object to the telecast of a specified number of Braves games on TBS SuperStation and the accompanying nationwide satellite distribution of the TBS SuperStation signal by common carrier.

In 1990, \$9,000,000 was paid into the fund. Currently the fee is \$15,000,000. Other teams widely distributed beyond the home market via super station carriage also compensate Major League Baseball (MLB) for the alleged harm caused by such distribution.

This fee arrangement represents an example of marketplace action to compensate MLB for the alleged harm to their programs from distant signal carriage.

The rights stations and networks are willing to pay for sports are to a large degree influenced by advertising more than the value placed on such events by cable operators and subscribers. The CPM's (costs per thousand homes or persons viewing) are substantially higher for sports than other types of programming. For example, typical CPM's for major sports are double those of news, triple the value of daytime television, and comparable to or higher than prime time entertainment. Likewise, the sellout levels (the proportion of total advertising availabilities sold) are higher for sports. These two factors explain the relatively high ad revenues per audience generated by spots.

What networks and stations pay for rights is based on the expectation of a high return in advertising dollars. The economics relate more to what advertisers are willing to pay for viewing than the viewing itself.

COMPARING THE COSTS OF SPORTS AND SYNDICATED PROGRAMS

Braves (@ \$4,700 per half hour of play) and Hawks (@ \$22,00 per half hour of play) establish a range of fees to compare with series and feature film product. For series programming, TBS has not exceeded the \$22,000 per half hour of play level, but has acquired programming at the high end of this range. For feature films, TBS has acquired movie rights that cost in excess of double the \$22,000 per half hour of play mark.

In comparing these fees, it is essential to recognize that TBS acquires national, non-exclusive rights to series and feature films. If exclusive rights were purchased, the cost of series and movies would be sharply higher.

Unlike the individual episode of a situation comedy or individual play of a movie, the telecast of a sporting event offers either complete or nearly complete exclusivity.

CONTRIBUTION TO TBS SUPERSTATION VIEWING AND AD REVENUES

The following table illustrates the proportion of total air time devoted to major sports, the share of advertising revenue generated by these programs and the proportion of total viewing developed by these telecasts:

SPORTS PROGRAM	% OF TOTAL AIR TIME	% OF TOTAL AUDIENCE	% OF TOTAL AD REVENUE	% OF AUDIENCE BEYOND ATLANTA	% OF AD DOLLARS GENERATED BEYOND ATLANTA
HAWKS BASKETBALL	0.65%	0.63%	3.17%	0.59%	2.59%
BRAVES BASEBALL	3.76%	3.99%	7.66%	3.77%	6.02%
SEC FOOTBALL	0.47%	0.62%	1.47%	0.66%	1.27%
COPPER BOWL	0.04%	0.06%	0.06%	0.06%	0.06%
TOTAL	4.92%	5.30%	12.36%	5.08%	9.94%

Major sports did generate almost double its audience share in terms of its share of ad revenue (excluding Atlanta), however, the total share of ad dollars achieved was less than 10% of all "national" revenue.

For 1990, syndicated programming (series and feature films) accounted for approximately 80% of all ad revenue generated by the distant signal component of TBS' audience, and a slightly higher proportion of total viewing.

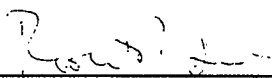
CONCLUSION

It is not coincidence that Turner Broadcasting became a leader in the development of cable television audience research as WTBS grew to become TBS Superstation. Audience research was the foundation on which programming decisions were made. Those decisions were made to attract and to keep subscribers interested in receiving TBS. Our success in making those decisions is shown by the widespread carriage of TBS and the relatively high ratings that TBS continues to enjoy.

Television ratings tell us to what extent and how subscribers use our programming. Viewing is, after all, the end use of our product. Ratings supply the link between programmer and subscriber -- the end user of our product. While attitudinal studies tell us about the "why" of subscriber behavior, ratings tell us what that behavior is. Many new cable channels have been offered based on stated subscriber preferences and failed. Those that have lasted and succeeded are those that receive the largest ratings.

My testimony relies on the same research tools that I developed for TBS Superstation and that were used in 1990 to make program purchasing and scheduling decisions. The research underscores the value of syndicated programming to subscribers all around the country based not only on stated preferences -- the "why" of their behavior -- but also on the ratings that confirm that those preferences were translated into viewing activity. By all of those measures, syndicated programming is far and away the most valuable programming available to TBS and other cable programmers in building their subscriber base and keeping it.

I declare under penalty of perjury that the foregoing is true and correct and of my personal knowledge. Executed on August 13, 1993.



Robert P. Sieber

Superviewers - TBS Positioning Study

Total Sample
Weighted

SAMPLE SIZE = 1215

MARKET NEED STRUCTURE

	AVERAGE ATTITUDE	0%	25%	50%	75%	100%	% UNFAVORABLE (-5 to -3)	% NEUTRAL (-2 to +2)	% FAVORABLE (+3 to +5)
1 Hi quality programs	4.3						0.3	7.7	92.0
2 Limitd comm interrpt	4.1						1.5	10.6	87.9
3 Pgm family can watch	4.1						0.6	12.2	87.1
4 Wide variety program	4.0						0.6	13.0	86.4
5 Pgm that mak u think	3.9						1.1	12.5	86.3
6 Pgm somthing for all	3.7						0.7	19.2	80.1
7 Keep u informd/news	3.7						2.4	15.7	81.9
8 Educationl pgm/child	3.5						3.1	21.2	75.7
9 Predictable schedule	3.3						2.1	25.7	72.2
10 Pgms not avail netwk	3.2						1.6	27.1	71.3
11 Late night news	3.1						2.0	29.9	68.1
12 Show a lot of movies	3.0						1.6	31.3	67.1
13 Pgm/animal & wildlif	3.0						2.8	29.5	67.7
14 Documentary programs	3.0						3.4	28.3	68.3
15 Mystery shows	3.0						1.8	30.3	67.9
16 Children-orientd pgm	2.9						2.8	31.2	66.0
17 Situation comedies	2.9						3.8	28.5	67.7
18 Recent pgm Cheers	2.9						3.9	28.5	67.6
19 Good old-fash pgmng	2.8						2.9	33.8	63.3
20 Prime-tim child pgm	2.8						4.4	30.5	65.1
21 Pgm/envirnmtal issu	2.8						3.1	34.8	62.1
22 Variety child pgms	2.8						5.2	30.8	64.0
23 Morning news shows	2.7						2.1	37.9	60.0
24 Innovativ programng	2.7						1.8	36.4	61.8
25 Reality-based shows	2.6						6.5	30.0	63.5
26 Pgms deal/soc.issues	2.5						4.1	38.2	57.7
27 Music/variety specs	2.5						4.2	38.4	57.4
28 Performnc/pop stars	2.4						4.3	40.1	55.6
29 Science programs	2.4						5.7	37.4	56.9
30 Detective/crime pgms	2.4						4.6	39.6	55.9
31 Movie made /cable-TV	2.4						4.6	38.3	57.1
32 Wkda morn child pgm	2.2						6.4	38.7	54.8
33 Stand-up comedy	2.2						6.9	40.0	53.2
34 Pgm oriented / women	2.2						3.3	46.7	50.0
35 Pgm oriented / men	2.1						4.1	47.7	48.3
36 Classic/Donna Reed	2.0						9.7	37.6	52.7
37 Animated cartoons	1.9						7.9	43.7	48.4
38 Variety of sports	1.9						11.0	38.4	50.7
39 Show mini-series	1.8						8.4	44.4	47.1
40 Afternoon cartoons	1.7						10.1	43.2	46.7
41 Science fict pgmng	1.7						9.9	42.1	48.0
42 Pgm/specif cable/TV	1.7						4.1	56.2	39.7
43 Magazine pgms	1.6						9.3	48.5	42.2
44 Broadwa play/theater	1.6						9.4	48.7	41.9
45 Western series	1.5						8.4	52.3	39.3
46 Home video programs	1.3						11.1	50.3	38.5
47 Courtroom programs	1.3						11.1	51.0	37.9
48 Talk show/aud partic	1.3						12.2	49.7	38.1
49 Movie hostd/celebrity	1.2						8.5	60.2	31.3
50 Late nite talk shows	1.1						11.9	52.5	35.6